STUDENT PRACTICE

Moustafa Math Practice

24 mixed sessions of 30 questions each. Unit practice has two 15-question sessions per unit.

Two mixed sessions per week for 12 weeks. Unit practice has separate packets.

32 extra practice questions follow the sessions.

Curriculum 7.1.0 · Seed 5102026

Write your answers on paper when needed.

12-week overview

Week 1
Sessions 1-2

Week 2
Sessions 3-4

Week 3
Sessions 5-6

Week 4
Sessions 7-8

Week 5
Sessions 9-10

Week 6
Sessions 11-12

Week 7
Sessions 13-14

Week 8
Sessions 15-16

Week 9
Sessions 17-18

Week 10
Sessions 19-20

Week 11
Sessions 21-22

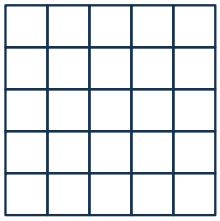
Week 12
Sessions 23-24

Session 1

MOU-S01-C01 | Grade 5 | Unit Cubes and Volume

5.MD.C.4 | word problem

This drawing shows the bottom layer of a prism. There are 3 full layers. How many unit cubes fill the prism?



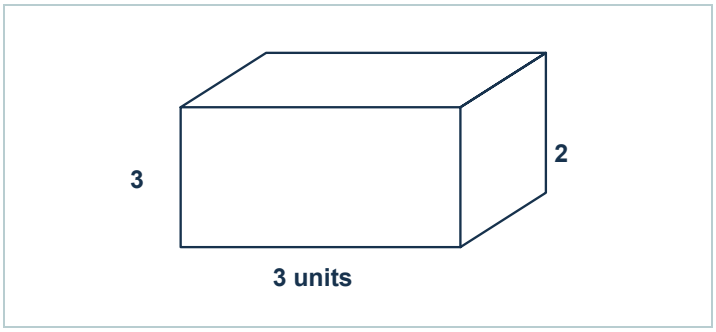
Writing space

Session 1

MOU-S01-C02 | Grade 5 | Expressions for Finding Volume

5.MD.C.5 | reasoning

Which expressions give the volume of this prism? Select all that apply.



- □ **A.** (3 × 2) × 3
- □ **B.** 3 + 2 + 3
- □ **C.** 3 × (2 × 3)

Writing space

MOU-S01-C03 | Grade 5 | Volumes of Solid Figures

5.MD.C.5 | word problem

A solid joins two prisms without overlap. Their dimensions are 6 by 2 by 3 and 2 by 2 by 2. Find the total volume.

Writing space

Session 1

MOU-S01-C04 | Grade 5 | Fractions as Quotients

5.NF.B.3 | word problem

4 identical sandwiches are shared equally by 6 children. What fraction of a sandwich does each child get?

Writing space

MOU-S01-C05 | Grade 5 | Fractions of Whole Numbers

5.NF.B.4 | word problem

3/4 of 8 students choose art. How many students choose art?

Writing space

MOU-S01-C06 | Grade 5 | Area and Fractional Side Lengths

5.NF.B.4 | word problem

A rectangle is 3/4 meter long and 5/2 meters wide. What is its area in square meters?

Writing space

MOU-S01-C07 | Grade 5 | Fraction Multiplication

5.NF.B.4 | word problem

A rectangle is 4/5 meter long and 3/2 meters wide. What is its area in square meters?

Writing space

Session 1

MOU-S01-C08 | Grade 5 | Fraction Division

5.NF.B.7 | word problem

6 meters of ribbon are cut into pieces of length 1/5 meter. How many pieces are made?

Writing space

MOU-S01-C09 | Grade 5 | Problem Solving with Fractions

5.NF.B.7 | word problem

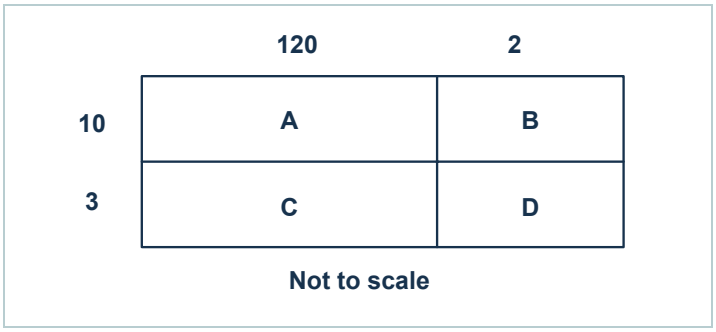
A recipe uses 1/2 cup of oil. Ella makes half a recipe. How many cups of oil are needed?

Writing space

MOU-S01-C10 | Grade 5 | Multi-digit Multiplication Using the Standard Algorithm

5.NBT.B.5 | word problem

Use the area model to find the whole product.



Writing space

Session 1

MOU-S01-C11 | Grade 5 | Multi-digit Division Using Partial Quotients

5.NBT.B.6 | explanation

325 tiles fill boxes of 13. How many boxes are filled? Use partial quotients. Explain your reasoning and check your result.

Writing space

Session 1

MOU-S01-C12 | Grade 5 | Let's Put It to Work

5.NBT.B.6 | word problem

33 boxes each contain 16 books. 48 books are donated. How many remain?

Writing space

MOU-S01-C13 | Grade 5 | Numbers to Thousandths

5.NBT.A.3 | word problem

A number is 6 tenths plus 4 thousandths. Write it as a decimal.

Writing space

MOU-S01-C14 | Grade 5 | Add and Subtract Decimals

5.NBT.B.7 | word problem

Two ropes are 4.37 meters and 0.58 meter long. What is their combined length?

Writing space

MOU-S01-C15 | Grade 5 | Multiply Decimals

5.NBT.B.7 | word problem

Fabric costs $2.40 per meter. What is the cost of 0.2 meter, in dollars?

Writing space

Session 1

MOU-S01-C16 | Grade 5 | Divide Decimals

5.NBT.B.7 | word problem

How many 0.2-meter pieces fit in 1 meters of ribbon?

Writing space

MOU-S01-C17 | Grade 5 | Measurement Conversions and Powers of 10

5.MD.A.1 | word problem

A ribbon is 3.3 meters long. 30 centimeters are cut off. How many centimeters remain?

Writing space

MOU-S01-C18 | Grade 5 | Add and Subtract Fractions with Unlike Denominators

5.NF.A.1 | word problem

Add 1/2 and 1/18. Give a fraction.

Writing space

MOU-S01-C19 | Grade 4 | Understand Factors and Multiples

4.OA.B.4 | word problem

24 chairs form equal rows with no chairs left over. There are 8 rows. How many chairs are in each row?

Writing space

Session 1

MOU-S01-C20 | Grade 4 | Find Factor Pairs and Multiples

4.OA.B.4 | word problem

12 chairs form equal rows with no chairs left over. There are 4 rows. How many chairs are in each row?

Writing space

MOU-S01-C21 | Grade 4 | Size and Location of Fractions

4.NF.A.1 | word problem

How much more of this whole must be shaded to make one whole? Give a fraction.



One whole

Writing space

Session 1

MOU-S01-C22 | Grade 4 | Equivalent Fractions

4.NF.A.1 | reasoning

Every part of a 2-part strip is split into 3 equal smaller parts. What happens to the shaded fraction? Choose one answer.

- ○ **A.** Its value stays the same.
- ○ **B.** Its value is multiplied by the number of new parts.

Writing space

Session 1

MOU-S01-F01 | Grade 4 | Fast facts: Addition 4.NBT.B.4 | fluency

___ + 949 = 4648. Find the missing addend.

Writing space

MOU-S01-F02 | Grade 4 | Fast facts: Subtraction 4.NBT.B.4 | fluency

4326 - ___ = 3888. Find the missing amount.

Writing space

MOU-S01-F03 | Grade 5 | Fast facts: Multiplication 5.NBT.B.5 | fluency

Complete 167 x 29 = ___ using division to check.

Writing space

MOU-S01-F04 | Grade 5 | Fast facts: Division 5.NBT.B.6 | fluency

Find 3441 / 31 using multiplication to check.

Writing space

MOU-S01-F05 | Grade 5 | Fast facts: Addition 5.NBT.B.7 | fluency

___ + 0.1 = 1.4. Find the missing addend.

Writing space

MOU-S01-F06 | Grade 5 | Fast facts: Subtraction 5.NBT.B.7 | fluency

2.1 - ___ = 1.6. Find the missing amount.

Writing space

MOU-S01-F07 | Grade 5 | Fast facts: Multiplication 5.NBT.B.5 | fluency

Find 151 x 21 using a related fact.

Writing space

MOU-S01-F08 | Grade 5 | Fast facts: Division 5.NBT.B.6 | fluency

Find 2646 / 21.

Writing space

Session 2

MOU-S02-C01 | Grade 5 | The Size of a Product

5.NF.B.5 | reasoning

Without multiplying, compare 4 × 4/3 with 4. Choose one answer.

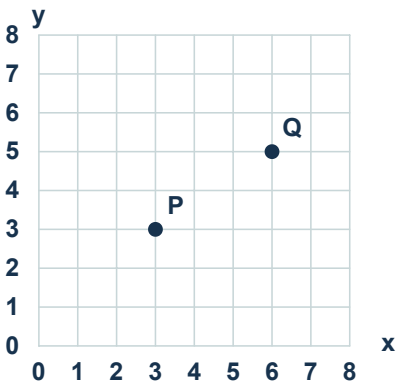
- ○ **A.** The product is greater.
- ○ **B.** The product is less.

Writing space

Session 2

MOU-S02-C02 | Grade 5 | The Coordinate Grid 5.G.A.2 | word problem

Travel from P to Q using only right and up moves on grid lines. How many unit moves are needed?



Writing space

Session 2

MOU-S02-C03 | Grade 5 | The Hierarchy of Shapes

5.G.B.4 | reasoning

Which statements are always true? Select all that apply.

- ☐ **A.** Every square is a rectangle.
- ☐ **B.** Every rectangle is a square.
- ☐ **C.** Every square is a rhombus.

Writing space

MOU-S02-C04 | Grade 5 | Numerical Patterns

5.OA.B.3 | word problem

Two patterns start at 3. A adds 5 each step. B adds 7. How far apart are their values after 3 steps?

Writing space

MOU-S02-C05 | Grade 5 | Multiply and Divide Whole Numbers

5.NBT.B.6 | word problem

36 boxes each contain 17 books. 102 books are donated. How many remain?

Writing space

Session 2

MOU-S02-C06 | Grade 5 | Apply Volume Concepts

5.MD.C.5 | word problem

A box is 4 by 2 by 4 units. A designer doubles only its height. How many additional unit cubes will fit?

Writing space

MOU-S02-C07 | Grade 5 | Fraction and Decimal Operations

5.NBT.B.7 | word problem

Add 2/2 and 0.25. Give a decimal.

Writing space

MOU-S02-C08 | Grade 5 | Creation and Design

5.MD.C.5 | word problem

A box is 5 by 3 by 4 units. A designer doubles only its height. How many additional unit cubes will fit?

Writing space

MOU-S02-C09 | Grade 5 | Unit Cubes and Volume

5.MD.C.4 | word problem

A prism has 8 cubes in each layer and volume 24 cubic units. How many layers are there?

Writing space

Session 2

MOU-S02-C10 | Grade 5 | Expressions for Finding Volume

5.MD.C.5 | word problem

A prism has 20 cubes in each layer and volume 60 cubic units. How many layers are there?

Writing space

Session 2

MOU-S02-C11 | Grade 5 | Volumes of Solid Figures

5.MD.C.5 | explanation

Two non-overlapping prisms make a solid of volume 65. One prism has dimensions 3 by 5 by 3. What is the other prism's volume? Explain your reasoning and check your result.

Writing space

Session 2

MOU-S02-C12 | Grade 5 | Fractions as Quotients

5.NF.B.3 | word problem

6 liters of juice are shared equally among 8 pitchers. How much goes in each pitcher? Give a fraction.

Writing space

MOU-S02-C13 | Grade 5 | Fractions of Whole Numbers

5.NF.B.4 | word problem

Noor says 1/2 of 8 is 7. Find the correct value.

Writing space

MOU-S02-C14 | Grade 5 | Area and Fractional Side Lengths

5.NF.B.4 | word problem

A rectangle is tiled with squares that each have area 1/9 square meter. There are 2 rows of 2 tiles. Find the area of the rectangle.



Writing space

Session 2

MOU-S02-C15 | Grade 5 | Fraction Multiplication

5.NF.B.4 | word problem

A strip has 2/3 shaded. 4/5 of that shaded part is crosshatched. What fraction of the original whole is crosshatched?

Writing space

MOU-S02-C16 | Grade 5 | Fraction Division

5.NF.B.7 | word problem

1/4 liter is shared equally among 3 cups. How much goes in each cup? Give a fraction.

Writing space

MOU-S02-C17 | Grade 5 | Problem Solving with Fractions

5.NF.B.7 | word problem

Ella has 6 liters of soup. After using 1 liter, the rest fills 1/4-liter bowls. How many bowls are filled?

Writing space

MOU-S02-C18 | Grade 5 | Multi-digit Multiplication Using the Standard Algorithm

5.NBT.B.5 | word problem

In the standard algorithm for 124 × 15, what is the partial product from the tens digit of 15?

Writing space

Session 2

MOU-S02-C19 | Grade 4 | Fraction Comparison

4.NF.A.2 | reasoning

Ribbon A is 3/4 meter long. Ribbon B is 1/2 meter long. Which ribbon is longer? Choose one answer.

- ○ **A.** Ribbon A
- ○ **B.** Ribbon B

Writing space

MOU-S02-C20 | Grade 4 | Equal Groups of Fractions

4.NF.B.4 | word problem

Each of 6 bottles holds 1/2 liter. How many liters do they hold altogether?

Writing space

MOU-S02-C21 | Grade 4 | Addition and Subtraction of Fractions

4.NF.B.3 | word problem

A path is 5/3 kilometers long. Jude walks 2/3 kilometer. How much farther is the end?

Writing space

Session 2

MOU-S02-C22 | Grade 4 | Addition of Tenths and Hundredths

4.NF.C.5 | word problem

Add 2/10 and 4/100. Give a fraction.

Writing space

Session 2

MOU-S02-F01 | Grade 4 | Fast facts: Addition
4.NBT.B.4 | fluency

2726 + ___ = 3502. Find the missing addend.

Writing space

MOU-S02-F02 | Grade 4 | Fast facts: Subtraction
4.NBT.B.4 | fluency

Find 3888 - 969 using an inverse operation.

Writing space

MOU-S02-F03 | Grade 5 | Fast facts: Multiplication
5.NBT.B.5 | fluency

Find 127 x 22 using a related fact.

Writing space

MOU-S02-F04 | Grade 5 | Fast facts: Division
5.NBT.B.6 | fluency

32 is a factor of 3392. What other factor completes the pair?

Writing space

MOU-S02-F05 | Grade 5 | Fast facts: Addition
5.NBT.B.7 | fluency

1.0 + ___ = 1.4. Find the missing addend.

Writing space

MOU-S02-F06 | Grade 5 | Fast facts: Subtraction
5.NBT.B.7 | fluency

Find 1.6 - 0.3 using a related addition fact.

Writing space

MOU-S02-F07 | Grade 5 | Fast facts: Multiplication
5.NBT.B.5 | fluency

Find 203 x 32.

Writing space

MOU-S02-F08 | Grade 5 | Fast facts: Division
5.NBT.B.6 | fluency

___ / 23 = 121. Find the dividend.

Writing space

Session 3

MOU-S03-C01 | Grade 5 | Multi-digit Division Using Partial Quotients

5.NBT.B.6 | word problem

To divide 330 by 15, Kai subtracts 300. What partial quotient is still needed?

Writing space

MOU-S03-C02 | Grade 5 | Let's Put It to Work

5.NBT.B.6 | word problem

A school has 596 students. Each bus holds 17. What is the fewest number of buses needed?

Writing space

MOU-S03-C03 | Grade 5 | Numbers to Thousandths

5.NBT.A.3 | word problem

How many thousandths are in 0.3?

Writing space

MOU-S03-C04 | Grade 5 | Add and Subtract Decimals

5.NBT.B.7 | word problem

A jug contains 6.37 liters. Some is poured out, leaving 6.09 liters. How much was poured out?

Writing space

Session 3

MOU-S03-C05 | Grade 5 | Multiply Decimals

5.NBT.B.7 | word problem

A calculator shows 48 for 16 × 3. What is 1.6 × 0.3?

Writing space

MOU-S03-C06 | Grade 5 | Divide Decimals

5.NBT.B.7 | word problem

0.8 liters fill 2 equal bottles. How many liters are in each bottle?

Writing space

MOU-S03-C07 | Grade 5 | Measurement Conversions and Powers of 10

5.MD.A.1 | word problem

A ribbon is 5400 millimeters long. What is its length in meters?

Writing space

MOU-S03-C08 | Grade 5 | Add and Subtract Fractions with Unlike Denominators

5.NF.A.1 | word problem

A walk is 1/2 mile. Layla has walked 1/16 mile. How much remains?

Writing space

Session 3

MOU-S03-C09 | Grade 5 | The Size of a Product

5.NF.B.5 | reasoning

Which products are less than 6? Select all that apply.

- ☐ **A.** 6 × 3/4
- ☐ **B.** 6 × 1
- ☐ **C.** 6 × 2/3

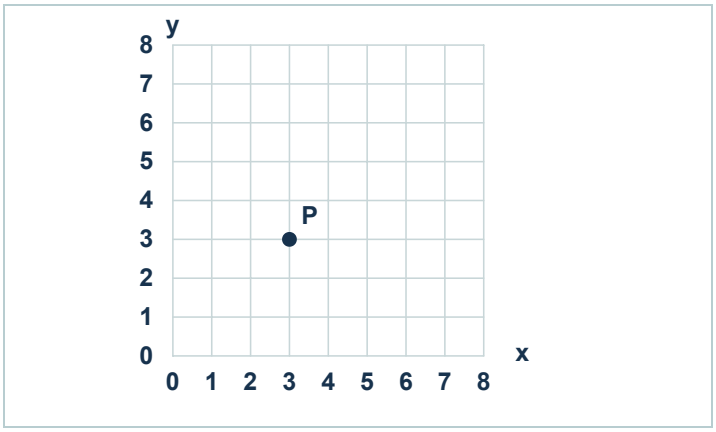
Writing space

Session 3

MOU-S03-C10 | Grade 5 | The Coordinate Grid

5.G.A.2 | word problem

Point P moves 2 units right and 1 unit up. Give the new ordered pair.



Writing space

Session 3

MOU-S03-C11 | Grade 5 | The Hierarchy of Shapes

5.G.B.4 | reasoning

A quadrilateral has four equal sides but no right angles. Which name must fit? Choose one answer.

- ○ **A.** Rhombus
- ○ **B.** Rectangle

Writing space

Session 3

MOU-S03-C12 | Grade 5 | Numerical Patterns

5.OA.B.3 | explanation

Two patterns start at 0. Pattern A adds 3. Pattern B adds 6. At one step, A is 15. What is B at that step? Explain your reasoning and check your result.

Writing space

Session 3

MOU-S03-C13 | Grade 5 | Multiply and Divide Whole Numbers 5.NBT.B.6 | word problem

A school has 529 students. Each bus holds 16. What is the fewest number of buses needed?

Writing space

MOU-S03-C14 | Grade 5 | Apply Volume Concepts 5.MD.C.5 | word problem

Design a box with volume 96 cubic units, length 6, and width 4. What height meets these requirements?

Writing space

MOU-S03-C15 | Grade 5 | Fraction and Decimal Operations 5.NBT.B.7 | word problem

A bottle holds 4.75 liters. 4.25 liters are used. Give the remaining amount as a fraction of a liter.

Writing space

MOU-S03-C16 | Grade 5 | Creation and Design 5.MD.C.5 | word problem

Design a box with volume 16 cubic units, length 2, and width 2. What height meets these requirements?

Writing space

Session 3

MOU-S03-C17 | Grade 5 | Unit Cubes and Volume

5.MD.C.4 | word problem

This drawing shows the bottom layer of a prism. There are 3 full layers. How many unit cubes fill the prism?



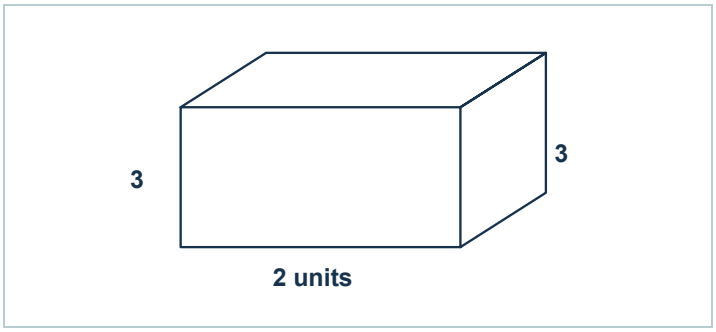
Writing space

Session 3

MOU-S03-C18 | Grade 5 | Expressions for Finding Volume

5.MD.C.5 | reasoning

Which expressions give the volume of this prism? Select all that apply.



- □ **A.** (2 × 3) × 3
- □ **B.** 2 + 3 + 3
- □ **C.** 2 × (3 × 3)

Writing space

MOU-S03-C19 | Grade 4 | Decimals with Tenths and Hundredths

4.NF.C.6 | word problem

A number is 2 tenths plus 4 hundredths. Write it as a decimal.

Writing space

Session 3

MOU-S03-C20 | Grade 4 | Place Value Relationships through 1,000,000 4.NBT.A.1 | word problem

A number is 54000. What number has every digit shifted one place to the left, with a zero in the ones place?

Writing space

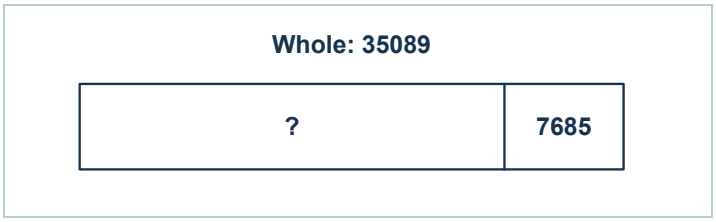
MOU-S03-C21 | Grade 4 | Compare, Order, and Round 4.NBT.A.3 | word problem

The numbers 30567, 31767, and 30367 label three towns. What is the difference between the greatest and least?

Writing space

MOU-S03-C22 | Grade 4 | Add and Subtract 4.NBT.B.4 | word problem

Jude has some museum tickets. After getting 7685 more, there are 35089. How many were there at first?



Writing space

Session 3

MOU-S03-F01 | Grade 4 | Fast facts: Addition — 4.NBT.B.4 | fluency

Complete 3257 + 607 = ___ using an inverse operation.

Writing space

MOU-S03-F02 | Grade 4 | Fast facts: Subtraction — 4.NBT.B.4 | fluency

Find 4242 - 796 using a related addition fact.

Writing space

MOU-S03-F03 | Grade 5 | Fast facts: Multiplication — 5.NBT.B.5 | fluency

One factor of 5973 is 181. What is the other factor?

Writing space

MOU-S03-F04 | Grade 5 | Fast facts: Division — 5.NBT.B.6 | fluency

Find 3434 / 34 using a related multiplication fact.

Writing space

MOU-S03-F05 | Grade 5 | Fast facts: Addition — 5.NBT.B.7 | fluency

Find 1.5 + 0.2 using a fact or place-value pattern.

Writing space

MOU-S03-F06 | Grade 5 | Fast facts: Subtraction — 5.NBT.B.7 | fluency

Find 1.1 - 0.1.

Writing space

MOU-S03-F07 | Grade 5 | Fast facts: Multiplication — 5.NBT.B.5 | fluency

___ x 25 = 4075. Find the missing factor.

Writing space

MOU-S03-F08 | Grade 5 | Fast facts: Division — 5.NBT.B.6 | fluency

2925 / ___ = 117. Find the divisor.

Writing space

Session 4

MOU-S04-C01 | Grade 5 | Volumes of Solid Figures

5.MD.C.5 | word problem

A solid joins two prisms without overlap. Their dimensions are 5 by 2 by 3 and 2 by 2 by 2. Find the total volume.

Writing space

MOU-S04-C02 | Grade 5 | Fractions as Quotients

5.NF.B.3 | word problem

3 identical sandwiches are shared equally by 6 children. What fraction of a sandwich does each child get?

Writing space

MOU-S04-C03 | Grade 5 | Fractions of Whole Numbers

5.NF.B.4 | word problem

2/3 of 18 students choose art. How many students choose art?

Writing space

MOU-S04-C04 | Grade 5 | Area and Fractional Side Lengths

5.NF.B.4 | word problem

A rectangle is 3/4 meter long and 4/2 meters wide. What is its area in square meters?

Writing space

Session 4

MOU-S04-C05 | Grade 5 | Fraction Multiplication

5.NF.B.4 | word problem

A rectangle is 4/5 meter long and 2/2 meters wide. What is its area in square meters?

Writing space

MOU-S04-C06 | Grade 5 | Fraction Division

5.NF.B.7 | word problem

5 meters of ribbon are cut into pieces of length 1/5 meter. How many pieces are made?

Writing space

MOU-S04-C07 | Grade 5 | Problem Solving with Fractions

5.NF.B.7 | word problem

A recipe uses 1/2 cup of oil. Omar makes half a recipe. How many cups of oil are needed?

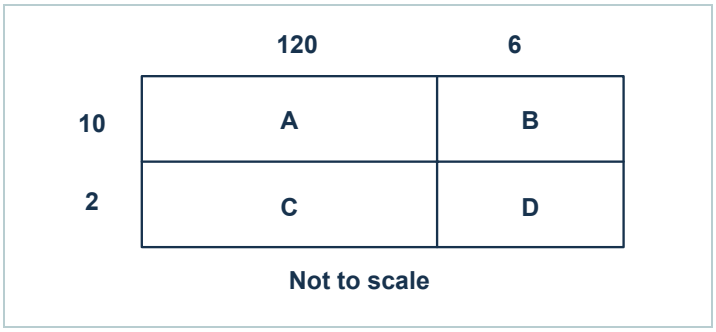
Writing space

Session 4

MOU-S04-C08 | Grade 5 | Multi-digit Multiplication Using the Standard Algorithm

5.NBT.B.5 | word problem

Use the area model to find the whole product.



Writing space

MOU-S04-C09 | Grade 5 | Multi-digit Division Using Partial Quotients

5.NBT.B.6 | word problem

312 tiles fill boxes of 13. How many boxes are filled? Use partial quotients.

Writing space

MOU-S04-C10 | Grade 5 | Let's Put It to Work

5.NBT.B.6 | word problem

32 boxes each contain 16 books. 32 books are donated. How many remain?

Writing space

Session 4

MOU-S04-C11 | Grade 5 | Numbers to Thousandths

5.NBT.A.3 | explanation

A number is 5 tenths plus 4 thousandths. Write it as a decimal. Explain your reasoning and check your result.

Writing space

Session 4

MOU-S04-C12 | Grade 5 | Add and Subtract Decimals

5.NBT.B.7 | word problem

Two ropes are 3.37 meters and 0.58 meter long. What is their combined length?

Writing space

MOU-S04-C13 | Grade 5 | Multiply Decimals

5.NBT.B.7 | word problem

Fabric costs $6.40 per meter. What is the cost of 0.5 meter, in dollars?

Writing space

MOU-S04-C14 | Grade 5 | Divide Decimals

5.NBT.B.7 | word problem

How many 0.2-meter pieces fit in 0.8 meters of ribbon?

Writing space

MOU-S04-C15 | Grade 5 | Measurement Conversions and Powers of 10

5.MD.A.1 | word problem

A ribbon is 2.3 meters long. 30 centimeters are cut off. How many centimeters remain?

Writing space

Session 4

MOU-S04-C16 | Grade 5 | Add and Subtract Fractions with Unlike Denominators

5.NF.A.1 | word problem

Add 1/2 and 1/16. Give a fraction.

Writing space

MOU-S04-C17 | Grade 5 | The Size of a Product

5.NF.B.5 | reasoning

Without multiplying, compare 3 × 5/4 with 3. Choose one answer.

- ○ **A.** The product is greater.
- ○ **B.** The product is less.

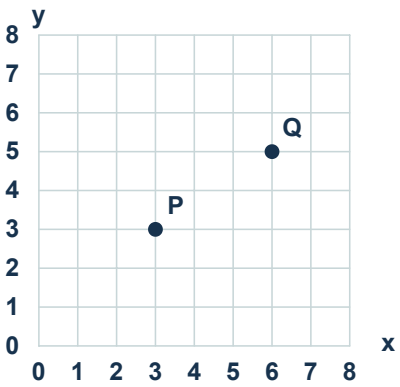
Writing space

Session 4

MOU-S04-C18 | Grade 5 | The Coordinate Grid

5.G.A.2 | word problem

Travel from P to Q using only right and up moves on grid lines. How many unit moves are needed?



Writing space

MOU-S04-C19 | Grade 4 | Multiplicative Comparison

4.OA.A.2 | word problem

Kai's ribbon is 30 cm long. Amir's is 6 cm long. How many times as long is the first ribbon?

Writing space

Session 4

MOU-S04-C20 | Grade 4 | Measurement Conversion

4.MD.A.1 | word problem

A ribbon is 4 meters long. 20 centimeters are cut off. How many centimeters remain?

Writing space

MOU-S04-C21 | Grade 4 | Let’s Put It to Work

4.MD.A.3 | word problem

A rectangular display must have area 35 square meters and width 5 meters. What length meets these requirements?

Writing space

MOU-S04-C22 | Grade 4 | Features of Patterns

4.OA.C.5 | word problem

A pattern starts at 8 and adds 3. What is the term after 5 steps?

Writing space

Session 4

MOU-S04-F01 | Grade 4 | Fast facts: Addition
4.NBT.B.4 | fluency

Find 3788 + 438 using a fact or place-value pattern.

Writing space

MOU-S04-F02 | Grade 4 | Fast facts: Subtraction
4.NBT.B.4 | fluency

___ - 627 = 2477. Find the starting number.

Writing space

MOU-S04-F03 | Grade 5 | Fast facts: Multiplication
5.NBT.B.5 | fluency

Find 141 x 26 by breaking apart a factor.

Writing space

MOU-S04-F04 | Grade 5 | Fast facts: Division
5.NBT.B.6 | fluency

Find 1824 / 19 using multiplication to check.

Writing space

MOU-S04-F05 | Grade 5 | Fast facts: Addition
5.NBT.B.7 | fluency

Find 1.2 + 0.5.

Writing space

MOU-S04-F06 | Grade 5 | Fast facts: Subtraction
5.NBT.B.7 | fluency

___ - 0.4 = 1.5. Find the starting number.

Writing space

MOU-S04-F07 | Grade 5 | Fast facts: Multiplication
5.NBT.B.5 | fluency

123 x ___ = 2214. Find the missing factor.

Writing space

MOU-S04-F08 | Grade 5 | Fast facts: Division
5.NBT.B.6 | fluency

Find 2997 / 27 using multiplication to check.

Writing space

Session 5

MOU-S05-C01 | Grade 5 | The Hierarchy of Shapes

5.G.B.4 | reasoning

A shape belongs to both the rectangle group and the rhombus group. What must it be? Choose one answer.

- ○ **A.** A square
- ○ **B.** A triangle

Writing space

MOU-S05-C02 | Grade 5 | Numerical Patterns

5.OA.B.3 | word problem

Two patterns start at 2. A adds 5 each step. B adds 7. How far apart are their values after 2 steps?

Writing space

MOU-S05-C03 | Grade 5 | Multiply and Divide Whole Numbers

5.NBT.B.6 | word problem

35 boxes each contain 17 books. 85 books are donated. How many remain?

Writing space

Session 5

MOU-S05-C04 | Grade 5 | Apply Volume Concepts

5.MD.C.5 | word problem

A box is 3 by 2 by 4 units. A designer doubles only its height. How many additional unit cubes will fit?

Writing space

MOU-S05-C05 | Grade 5 | Fraction and Decimal Operations

5.NBT.B.7 | word problem

Add 6/2 and 0.25. Give a decimal.

Writing space

MOU-S05-C06 | Grade 5 | Creation and Design

5.MD.C.5 | word problem

A box is 4 by 3 by 4 units. A designer doubles only its height. How many additional unit cubes will fit?

Writing space

MOU-S05-C07 | Grade 5 | Unit Cubes and Volume

5.MD.C.4 | word problem

A prism has 18 cubes in each layer and volume 54 cubic units. How many layers are there?

Writing space

Session 5

MOU-S05-C08 | Grade 5 | Expressions for Finding Volume

5.MD.C.5 | word problem

A prism has 16 cubes in each layer and volume 48 cubic units. How many layers are there?

Writing space

MOU-S05-C09 | Grade 5 | Volumes of Solid Figures

5.MD.C.5 | word problem

Two non-overlapping prisms make a solid of volume 50. One prism has dimensions 2 by 5 by 3. What is the other prism's volume?

Writing space

MOU-S05-C10 | Grade 5 | Fractions as Quotients

5.NF.B.3 | word problem

5 liters of juice are shared equally among 8 pitchers. How much goes in each pitcher? Give a fraction.

Writing space

Session 5

MOU-S05-C11 | Grade 5 | Fractions of Whole Numbers

5.NF.B.4 | explanation

Zoe says 1/2 of 6 is 5. Find the correct value. Explain your reasoning and check your result.

Writing space

Session 5

MOU-S05-C12 | Grade 5 | Area and Fractional Side Lengths

5.NF.B.4 | word problem

A rectangle is tiled with squares that each have area 1/4 square meter. There are 1 rows of 6 tiles. Find the area of the rectangle.



Writing space

MOU-S05-C13 | Grade 5 | Fraction Multiplication

5.NF.B.4 | word problem

A strip has 2/3 shaded. 3/4 of that shaded part is crosshatched. What fraction of the original whole is crosshatched?

Writing space

MOU-S05-C14 | Grade 5 | Fraction Division

5.NF.B.7 | word problem

1/4 liter is shared equally among 2 cups. How much goes in each cup? Give a fraction.

Writing space

Session 5

MOU-S05-C15 | Grade 5 | Problem Solving with Fractions

5.NF.B.7 | word problem

Omar has 5 liters of soup. After using 1 liter, the rest fills 1/4-liter bowls. How many bowls are filled?

Writing space

MOU-S05-C16 | Grade 5 | Multi-digit Multiplication Using the Standard Algorithm

5.NBT.B.5 | word problem

In the standard algorithm for 123 × 15, what is the partial product from the tens digit of 15?

Writing space

MOU-S05-C17 | Grade 5 | Multi-digit Division Using Partial Quotients

5.NBT.B.6 | word problem

To divide 390 by 15, Kai subtracts 300. What partial quotient is still needed?

Writing space

MOU-S05-C18 | Grade 5 | Let's Put It to Work

5.NBT.B.6 | word problem

A school has 477 students. Each bus holds 14. What is the fewest number of buses needed?

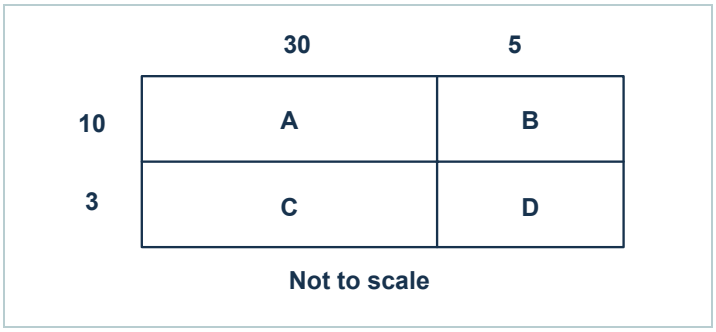
Writing space

Session 5

MOU-S05-C19 | Grade 4 | Multi-Digit Multiplication

4.NBT.B.5 | word problem

Use the area model to find the whole product.



Writing space

MOU-S05-C20 | Grade 4 | Multi-Digit Division

4.NBT.B.6 | word problem

92 tiles fill boxes of 4. How many boxes are filled? Use partial quotients.

Writing space

MOU-S05-C21 | Grade 4 | Let's Put It to Work: Problem Solving with Large Numbers

4.OA.A.3 | word problem

36 boxes each contain 4 books. 24 books are donated. How many remain?

Writing space

Session 5

MOU-S05-C22 | Grade 4 | Points, Lines, Segments, Rays, and Angles

4.G.A.1 | reasoning

Two straight roads meet at a right angle. How are their center lines related? Choose one answer.

- ○ **A.** They are perpendicular.
- ○ **B.** They are parallel.

Writing space

Session 5

MOU-S05-F01 | Grade 4 | Fast facts: Addition

4.NBT.B.4 | fluency

___ + 969 = 3788. Find the missing addend.

Writing space

MOU-S05-F02 | Grade 4 | Fast facts: Subtraction

4.NBT.B.4 | fluency

3466 - ___ = 3008. Find the missing amount.

Writing space

MOU-S05-F03 | Grade 5 | Fast facts: Multiplication

5.NBT.B.5 | fluency

Find 193 x 19 using a related fact.

Writing space

MOU-S05-F04 | Grade 5 | Fast facts: Division

5.NBT.B.6 | fluency

Find 1911 / 21.

Writing space

MOU-S05-F05 | Grade 5 | Fast facts: Addition

5.NBT.B.7 | fluency

___ + 0.3 = 2.0. Find the missing addend.

Writing space

MOU-S05-F06 | Grade 5 | Fast facts: Subtraction

5.NBT.B.7 | fluency

1.4 - ___ = 1.2. Find the missing amount.

Writing space

MOU-S05-F07 | Grade 5 | Fast facts: Multiplication

5.NBT.B.5 | fluency

Complete 176 x 29 = ___ using division to check.

Writing space

MOU-S05-F08 | Grade 5 | Fast facts: Division

5.NBT.B.6 | fluency

Find 3074 / 29 using multiplication to check.

Writing space

Session 6

MOU-S06-C01 | Grade 5 | Numbers to Thousandths

5.NBT.A.3 | word problem

How many thousandths are in 0.2?

Writing space

MOU-S06-C02 | Grade 5 | Add and Subtract Decimals

5.NBT.B.7 | word problem

A jug contains 5.37 liters. Some is poured out, leaving 5.09 liters. How much was poured out?

Writing space

MOU-S06-C03 | Grade 5 | Multiply Decimals

5.NBT.B.7 | word problem

A calculator shows 36 for 12 × 3. What is 1.2 × 0.3?

Writing space

MOU-S06-C04 | Grade 5 | Divide Decimals

5.NBT.B.7 | word problem

1.8 liters fill 6 equal bottles. How many liters are in each bottle?

Writing space

Session 6

MOU-S06-C05 | Grade 5 | Measurement Conversions and Powers of 10

5.MD.A.1 | word problem

A ribbon is 4400 millimeters long. What is its length in meters?

Writing space

MOU-S06-C06 | Grade 5 | Add and Subtract Fractions with Unlike Denominators

5.NF.A.1 | word problem

A walk is 1/2 mile. Kai has walked 1/14 mile. How much remains?

Writing space

MOU-S06-C07 | Grade 5 | The Size of a Product

5.NF.B.5 | reasoning

Which products are less than 5? Select all that apply.

- □ **A.** 5 × 3/4
- □ **B.** 5 × 1
- □ **C.** 5 × 2/3

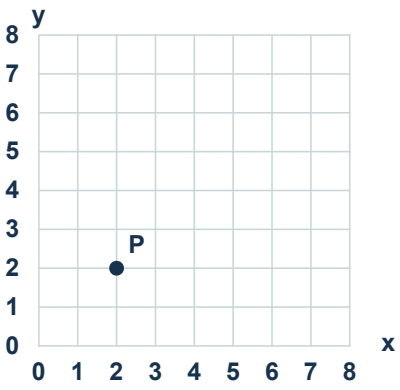
Writing space

Session 6

MOU-S06-C08 | Grade 5 | The Coordinate Grid

5.G.A.2 | word problem

Point P moves 2 units right and 1 unit up. Give the new ordered pair.



Writing space

Session 6

MOU-S06-C09 | Grade 5 | The Hierarchy of Shapes

5.G.B.4 | reasoning

Which groups must contain every rectangle? Select all that apply.

- ☐ **A.** Quadrilaterals
- ☐ **B.** Parallelograms
- ☐ **C.** Rhombuses

Writing space

MOU-S06-C10 | Grade 5 | Numerical Patterns

5.OA.B.3 | word problem

Two patterns start at 0. Pattern A adds 3. Pattern B adds 6. At one step, A is 12. What is B at that step?

Writing space

Session 6

MOU-S06-C11 | Grade 5 | Multiply and Divide Whole Numbers

5.NBT.B.6 | explanation

A school has 513 students. Each bus holds 16. What is the fewest number of buses needed? Explain your reasoning and check your result.

Writing space

Session 6

MOU-S06-C12 | Grade 5 | Apply Volume Concepts

5.MD.C.5 | word problem

Design a box with volume 80 cubic units, length 5, and width 4. What height meets these requirements?

Writing space

MOU-S06-C13 | Grade 5 | Fraction and Decimal Operations

5.NBT.B.7 | word problem

A bottle holds 3.75 liters. 3.25 liters are used. Give the remaining amount as a fraction of a liter.

Writing space

MOU-S06-C14 | Grade 5 | Creation and Design

5.MD.C.5 | word problem

Design a box with volume 120 cubic units, length 6, and width 5. What height meets these requirements?

Writing space

Session 6

MOU-S06-C15 | Grade 5 | Unit Cubes and Volume 5.MD.C.4 | word problem

This drawing shows the bottom layer of a prism. There are 3 full layers. How many unit cubes fill the prism?



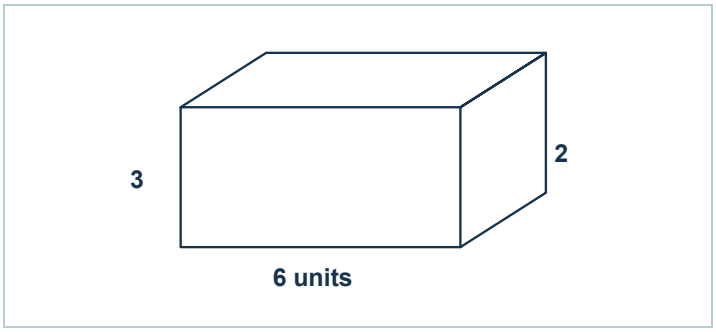
Writing space

Session 6

MOU-S06-C16 | Grade 5 | Expressions for Finding Volume

5.MD.C.5 | reasoning

Which expressions give the volume of this prism? Select all that apply.



- □ **A.** (6 × 2) × 3
- □ **B.** 6 + 2 + 3
- □ **C.** 6 × (2 × 3)

Writing space

MOU-S06-C17 | Grade 5 | Volumes of Solid Figures

5.MD.C.5 | word problem

A solid joins two prisms without overlap. Their dimensions are 4 by 3 by 3 and 2 by 3 by 2. Find the total volume.

Writing space

Session 6

MOU-S06-C18 | Grade 5 | Fractions as Quotients

5.NF.B.3 | word problem

2 identical sandwiches are shared equally by 7 children. What fraction of a sandwich does each child get?

Writing space

MOU-S06-C19 | Grade 4 | The Size of an Angle

4.MD.C.5 | reasoning

An angle measures 70 degrees. One ray is drawn longer without changing its direction. What is the new measure? Choose one answer.

- ○ **A.** 70 degrees
- ○ **B.** 80 degrees

Writing space

MOU-S06-C20 | Grade 4 | Angle Analysis

4.MD.C.7 | word problem

Two adjacent angles make a right angle. One measures 30 degrees. Find the other.

Writing space

Session 6

MOU-S06-C21 | Grade 4 | Side Lengths, Angles, and Lines of Symmetry

4.G.A.3 | reasoning

Which attributes must every square have? Select all that apply.

- ☐ **A.** Four right angles
- ☐ **B.** Four equal sides
- ☐ **C.** Exactly one line of symmetry

Writing space

MOU-S06-C22 | Grade 4 | Reason about Attributes to Solve Problems

4.G.A.2 | reasoning

Which statements are always true? Select all that apply.

- ☐ **A.** Every square is a rectangle.
- ☐ **B.** Every rectangle is a square.
- ☐ **C.** Every square is a rhombus.

Writing space

Session 6

MOU-S06-F01 | Grade 4 | Fast facts: Addition
4.NBT.B.4 | fluency

3346 + ___ = 4142. Find the missing addend.

Writing space

MOU-S06-F02 | Grade 4 | Fast facts: Subtraction
4.NBT.B.4 | fluency

Find 4528 - 989 using a related addition fact.

Writing space

MOU-S06-F03 | Grade 5 | Fast facts: Multiplication
5.NBT.B.5 | fluency

Find 153 x 31.

Writing space

MOU-S06-F04 | Grade 5 | Fast facts: Division
5.NBT.B.6 | fluency

___ / 23 = 86. Find the dividend.

Writing space

MOU-S06-F05 | Grade 5 | Fast facts: Addition
5.NBT.B.7 | fluency

1.4 + ___ = 1.5. Find the missing addend.

Writing space

MOU-S06-F06 | Grade 5 | Fast facts: Subtraction
5.NBT.B.7 | fluency

Find 2.2 - 0.5 using an inverse operation.

Writing space

MOU-S06-F07 | Grade 5 | Fast facts: Multiplication
5.NBT.B.5 | fluency

Find 136 x 22 using a related fact.

Writing space

MOU-S06-F08 | Grade 5 | Fast facts: Division
5.NBT.B.6 | fluency

31 is a factor of 3131. What other factor completes the pair?

Writing space

Session 7

MOU-S07-C01 | Grade 5 | Fractions of Whole Numbers

5.NF.B.4 | word problem

2/3 of 15 students choose art. How many students choose art?

Writing space

MOU-S07-C02 | Grade 5 | Area and Fractional Side Lengths

5.NF.B.4 | word problem

A rectangle is 3/4 meter long and 3/2 meters wide. What is its area in square meters?

Writing space

MOU-S07-C03 | Grade 5 | Fraction Multiplication

5.NF.B.4 | word problem

A rectangle is 3/4 meter long and 6/2 meters wide. What is its area in square meters?

Writing space

MOU-S07-C04 | Grade 5 | Fraction Division

5.NF.B.7 | word problem

4 meters of ribbon are cut into pieces of length 1/5 meter. How many pieces are made?

Writing space

Session 7

MOU-S07-C05 | Grade 5 | Problem Solving with Fractions

5.NF.B.7 | word problem

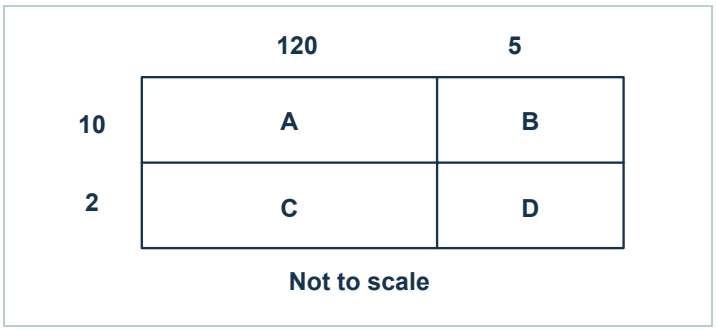
A recipe uses 1/2 cup of oil. Sofia makes half a recipe. How many cups of oil are needed?

Writing space

MOU-S07-C06 | Grade 5 | Multi-digit Multiplication Using the Standard Algorithm

5.NBT.B.5 | word problem

Use the area model to find the whole product.



Writing space

MOU-S07-C07 | Grade 5 | Multi-digit Division Using Partial Quotients

5.NBT.B.6 | word problem

299 tiles fill boxes of 13. How many boxes are filled? Use partial quotients.

Writing space

Session 7

MOU-S07-C08 | Grade 5 | Let's Put It to Work

5.NBT.B.6 | word problem

36 boxes each contain 15 books. 90 books are donated. How many remain?

Writing space

MOU-S07-C09 | Grade 5 | Numbers to Thousandths

5.NBT.A.3 | word problem

A number is 4 tenths plus 4 thousandths. Write it as a decimal.

Writing space

MOU-S07-C10 | Grade 5 | Add and Subtract Decimals

5.NBT.B.7 | word problem

Two ropes are 2.37 meters and 0.58 meter long. What is their combined length?

Writing space

Session 7

MOU-S07-C11 | Grade 5 | Multiply Decimals

5.NBT.B.7 | explanation

Fabric costs $5.40 per meter. What is the cost of 0.5 meter, in dollars? Explain your reasoning and check your result.

Writing space

Session 7

MOU-S07-C12 | Grade 5 | Divide Decimals

5.NBT.B.7 | word problem

How many 0.2-meter pieces fit in 0.6 meters of ribbon?

Writing space

MOU-S07-C13 | Grade 5 | Measurement Conversions and Powers of 10

5.MD.A.1 | word problem

A ribbon is 6.2 meters long. 20 centimeters are cut off. How many centimeters remain?

Writing space

MOU-S07-C14 | Grade 5 | Add and Subtract Fractions with Unlike Denominators

5.NF.A.1 | word problem

Add 1/2 and 1/14. Give a fraction.

Writing space

Session 7

MOU-S07-C15 | Grade 5 | The Size of a Product

5.NF.B.5 | reasoning

Without multiplying, compare 2 × 5/4 with 2. Choose one answer.

- ○ **A.** The product is greater.
- ○ **B.** The product is less.

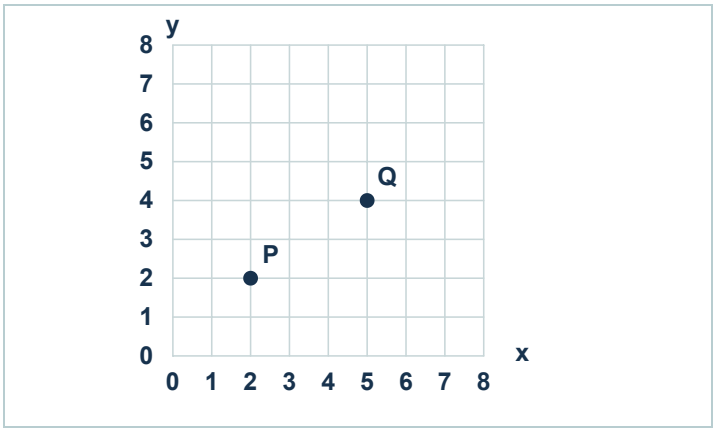
Writing space

Session 7

MOU-S07-C16 | Grade 5 | The Coordinate Grid

5.G.A.2 | word problem

Travel from P to Q using only right and up moves on grid lines. How many unit moves are needed?



Writing space

Session 7

MOU-S07-C17 | Grade 5 | The Hierarchy of Shapes 5.G.B.4 | reasoning

Which is a counterexample to 'every parallelogram is a rectangle'? Choose one answer.

- ○ **A.** A slanted parallelogram with no right angles
- ○ **B.** A square

Writing space

MOU-S07-C18 | Grade 5 | Numerical Patterns 5.OA.B.3 | word problem

Two patterns start at 6. A adds 5 each step. B adds 7. How far apart are their values after 6 steps?

Writing space

MOU-S07-C19 | Grade 4 | Reason with Fractions 4.NF.A.2 | reasoning

Ribbon A is 5/6 meter long. Ribbon B is 1/2 meter long. Which ribbon is longer? Choose one answer.

- ○ **A.** Ribbon A
- ○ **B.** Ribbon B

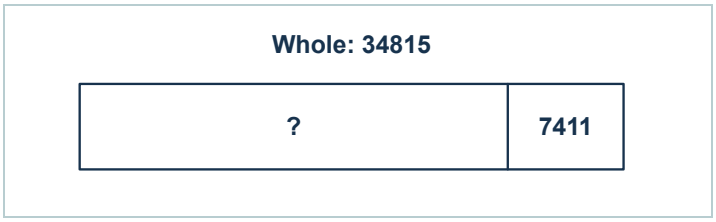
Writing space

Session 7

MOU-S07-C20 | Grade 4 | Whole-Number Operations

4.NBT.B.4 | word problem

Omar has some museum tickets. After getting 7411 more, there are 34815. How many were there at first?



Writing space

MOU-S07-C21 | Grade 4 | Solve Problems with Multiplication and Division

4.OA.A.3 | word problem

34 boxes each contain 4 books. 16 books are donated. How many remain?

Writing space

MOU-S07-C22 | Grade 4 | Creation and Design

4.MD.A.3 | word problem

A rectangular display must have area 49 square meters and width 7 meters. What length meets these requirements?

Writing space

Session 7

MOU-S07-F01 | Grade 4 | Fast facts: Addition

4.NBT.B.4 | fluency

Find 3877 + 627 using a fact or place-value pattern.

Writing space

MOU-S07-F02 | Grade 4 | Fast facts: Subtraction

4.NBT.B.4 | fluency

Find 3382 - 816.

Writing space

MOU-S07-F03 | Grade 5 | Fast facts: Multiplication

5.NBT.B.5 | fluency

___ x 23 = 4738. Find the missing factor.

Writing space

MOU-S07-F04 | Grade 5 | Fast facts: Division

5.NBT.B.6 | fluency

3225 / ___ = 129. Find the divisor.

Writing space

MOU-S07-F05 | Grade 5 | Fast facts: Addition

5.NBT.B.7 | fluency

Complete 1.1 + 0.4 = ___ using an inverse operation.

Writing space

MOU-S07-F06 | Grade 5 | Fast facts: Subtraction

5.NBT.B.7 | fluency

Find 1.7 - 0.3 using a related addition fact.

Writing space

MOU-S07-F07 | Grade 5 | Fast facts: Multiplication

5.NBT.B.5 | fluency

One factor of 6237 is 189. What is the other factor?

Writing space

MOU-S07-F08 | Grade 5 | Fast facts: Division

5.NBT.B.6 | fluency

Find 3168 / 33 using a related multiplication fact.

Writing space

Session 8

MOU-S08-C01 | Grade 5 | Multiply and Divide Whole Numbers

5.NBT.B.6 | word problem

34 boxes each contain 17 books. 68 books are donated. How many remain?

Writing space

MOU-S08-C02 | Grade 5 | Apply Volume Concepts

5.MD.C.5 | word problem

A box is 2 by 2 by 4 units. A designer doubles only its height. How many additional unit cubes will fit?

Writing space

MOU-S08-C03 | Grade 5 | Fraction and Decimal Operations

5.NBT.B.7 | word problem

Add 5/2 and 0.25. Give a decimal.

Writing space

MOU-S08-C04 | Grade 5 | Creation and Design

5.MD.C.5 | word problem

A box is 3 by 3 by 4 units. A designer doubles only its height. How many additional unit cubes will fit?

Writing space

Session 8

MOU-S08-C05 | Grade 5 | Unit Cubes and Volume

5.MD.C.4 | word problem

A prism has 15 cubes in each layer and volume 45 cubic units. How many layers are there?

Writing space

MOU-S08-C06 | Grade 5 | Expressions for Finding Volume

5.MD.C.5 | word problem

A prism has 12 cubes in each layer and volume 36 cubic units. How many layers are there?

Writing space

MOU-S08-C07 | Grade 5 | Volumes of Solid Figures

5.MD.C.5 | word problem

Two non-overlapping prisms make a solid of volume 88. One prism has dimensions 6 by 4 by 3. What is the other prism's volume?

Writing space

MOU-S08-C08 | Grade 5 | Fractions as Quotients

5.NF.B.3 | word problem

4 liters of juice are shared equally among 8 pitchers. How much goes in each pitcher? Give a fraction.

Writing space

Session 8

MOU-S08-C09 | Grade 5 | Fractions of Whole Numbers

5.NF.B.4 | word problem

Amir says 1/2 of 4 is 3. Find the correct value.

Writing space

MOU-S08-C10 | Grade 5 | Area and Fractional Side Lengths

5.NF.B.4 | word problem

A rectangle is tiled with squares that each have area 1/4 square meter. There are 1 rows of 5 tiles. Find the area of the rectangle.



Writing space

Session 8

MOU-S08-C11 | Grade 5 | Fraction Multiplication

5.NF.B.4 | explanation

A strip has 2/3 shaded. 2/3 of that shaded part is crosshatched. What fraction of the original whole is crosshatched? Explain your reasoning and check your result.

Writing space

Session 8

MOU-S08-C12 | Grade 5 | Fraction Division

5.NF.B.7 | word problem

1/3 liter is shared equally among 6 cups. How much goes in each cup? Give a fraction.

Writing space

MOU-S08-C13 | Grade 5 | Problem Solving with Fractions

5.NF.B.7 | word problem

Sofia has 4 liters of soup. After using 1 liter, the rest fills 1/4-liter bowls. How many bowls are filled?

Writing space

MOU-S08-C14 | Grade 5 | Multi-digit Multiplication Using the Standard Algorithm

5.NBT.B.5 | word problem

In the standard algorithm for 122 × 15, what is the partial product from the tens digit of 15?

Writing space

MOU-S08-C15 | Grade 5 | Multi-digit Division Using Partial Quotients

5.NBT.B.6 | word problem

To divide 375 by 15, Ella subtracts 300. What partial quotient is still needed?

Writing space

Session 8

MOU-S08-C16 | Grade 5 | Let's Put It to Work

5.NBT.B.6 | word problem

A school has 463 students. Each bus holds 14. What is the fewest number of buses needed?

Writing space

MOU-S08-C17 | Grade 5 | Numbers to Thousandths

5.NBT.A.3 | word problem

How many thousandths are in 0.6?

Writing space

MOU-S08-C18 | Grade 5 | Add and Subtract Decimals

5.NBT.B.7 | word problem

A jug contains 4.37 liters. Some is poured out, leaving 3.99 liters. How much was poured out?

Writing space

Session 8

MOU-S08-C19 | Grade 4 | Understand Factors and Multiples

4.OA.B.4 | reasoning

Which numbers are factors of 36? Select all that apply.

- ☐ A. 2
- ☐ B. 3
- ☐ C. 35

Writing space

MOU-S08-C20 | Grade 4 | Find Factor Pairs and Multiples

4.OA.B.4 | reasoning

Which numbers are factors of 24? Select all that apply.

- ☐ A. 2
- ☐ B. 3
- ☐ C. 23

Writing space

MOU-S08-C21 | Grade 4 | Size and Location of Fractions

4.NF.A.1 | word problem

A number line has 2 equal intervals from 0 to 1. A point is 3 intervals from 0. Give its value as a fraction.

Writing space

Session 8

MOU-S08-C22 | Grade 4 | Equivalent Fractions

4.NF.A.1 | word problem

Complete the equivalent fractions: 1/2 = ?/10. Give the missing numerator.

Writing space

Session 8

MOU-S08-F01 | Grade 4 | Fast facts: Addition
4.NBT.B.4 | fluency

Find 2908 + 458.

Writing space

MOU-S08-F02 | Grade 4 | Fast facts: Subtraction
4.NBT.B.4 | fluency

___ - 647 = 3097. Find the starting number.

Writing space

MOU-S08-F03 | Grade 5 | Fast facts: Multiplication
5.NBT.B.5 | fluency

166 x ___ = 5644. Find the missing factor.

Writing space

MOU-S08-F04 | Grade 5 | Fast facts: Division
5.NBT.B.6 | fluency

Find 3321 / 27 using multiplication to check.

Writing space

MOU-S08-F05 | Grade 5 | Fast facts: Addition
5.NBT.B.7 | fluency

Find 1.6 + 0.2 using a fact or place-value pattern.

Writing space

MOU-S08-F06 | Grade 5 | Fast facts: Subtraction
5.NBT.B.7 | fluency

___ - 0.1 = 1.1. Find the starting number.

Writing space

MOU-S08-F07 | Grade 5 | Fast facts: Multiplication
5.NBT.B.5 | fluency

Find 149 x 26 by breaking apart a factor.

Writing space

MOU-S08-F08 | Grade 5 | Fast facts: Division
5.NBT.B.6 | fluency

Find 3185 / 35 using multiplication to check.

Writing space

Session 9

MOU-S09-C01 | Grade 5 | Multiply Decimals

5.NBT.B.7 | word problem

A calculator shows 24 for 8 × 3. What is 0.8 × 0.3?

Writing space

MOU-S09-C02 | Grade 5 | Divide Decimals

5.NBT.B.7 | word problem

1.5 liters fill 5 equal bottles. How many liters are in each bottle?

Writing space

MOU-S09-C03 | Grade 5 | Measurement Conversions and Powers of 10

5.MD.A.1 | word problem

A ribbon is 3400 millimeters long. What is its length in meters?

Writing space

MOU-S09-C04 | Grade 5 | Add and Subtract Fractions with Unlike Denominators

5.NF.A.1 | word problem

A walk is 1/2 mile. Ella has walked 1/20 mile. How much remains?

Writing space

Session 9

MOU-S09-C05 | Grade 5 | The Size of a Product

5.NF.B.5 | reasoning

Which products are less than 4? Select all that apply.

- ☐ **A.** 4 × 3/4
- ☐ **B.** 4 × 1
- ☐ **C.** 4 × 2/3

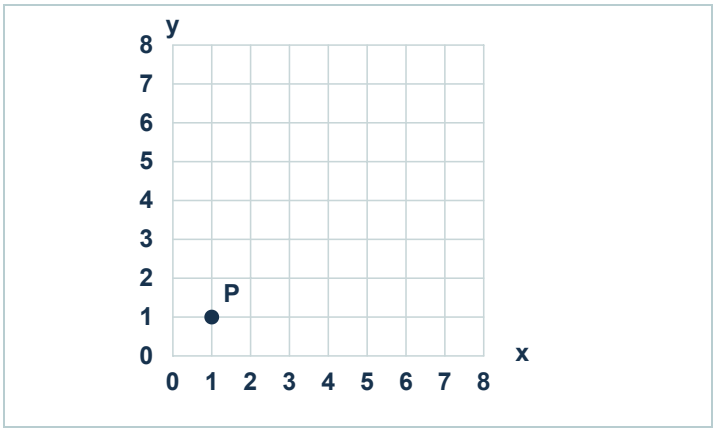
Writing space

Session 9

MOU-S09-C06 | Grade 5 | The Coordinate Grid

5.G.A.2 | word problem

Point P moves 2 units right and 1 unit up. Give the new ordered pair.



Writing space

Session 9

MOU-S09-C07 | Grade 5 | The Hierarchy of Shapes

5.G.B.4 | reasoning

Which property distinguishes a square from a rectangle that is not a square? Choose one answer.

- ○ **A.** All four sides are equal.
- ○ **B.** It has four right angles.

Writing space

MOU-S09-C08 | Grade 5 | Numerical Patterns

5.OA.B.3 | word problem

Two patterns start at 0. Pattern A adds 3. Pattern B adds 6. At one step, A is 9. What is B at that step?

Writing space

MOU-S09-C09 | Grade 5 | Multiply and Divide Whole Numbers

5.NBT.B.6 | word problem

A school has 541 students. Each bus holds 15. What is the fewest number of buses needed?

Writing space

Session 9

MOU-S09-C10 | Grade 5 | Apply Volume Concepts

5.MD.C.5 | word problem

Design a box with volume 64 cubic units, length 4, and width 4. What height meets these requirements?

Writing space

Session 9

MOU-S09-C11 | Grade 5 | Fraction and Decimal Operations

5.NBT.B.7 | explanation

A bottle holds 2.75 liters. 2.25 liters are used. Give the remaining amount as a fraction of a liter. Explain your reasoning and check your result.

Writing space

Session 9

MOU-S09-C12 | Grade 5 | Creation and Design

5.MD.C.5 | word problem

Design a box with volume 100 cubic units, length 5, and width 5. What height meets these requirements?

Writing space

MOU-S09-C13 | Grade 5 | Unit Cubes and Volume

5.MD.C.4 | word problem

This drawing shows the bottom layer of a prism. There are 3 full layers. How many unit cubes fill the prism?



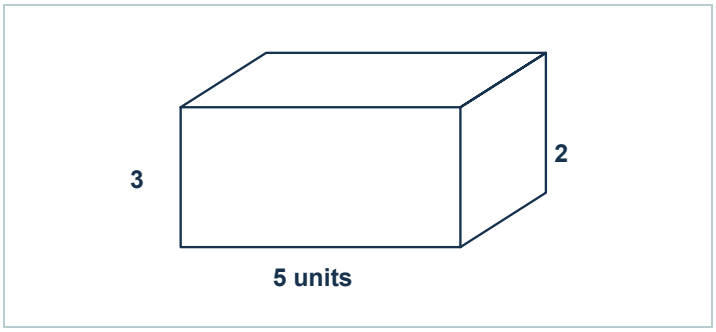
Writing space

Session 9

MOU-S09-C14 | Grade 5 | Expressions for Finding Volume

5.MD.C.5 | reasoning

Which expressions give the volume of this prism? Select all that apply.



- □ **A.** (5 × 2) × 3
- □ **B.** 5 + 2 + 3
- □ **C.** 5 × (2 × 3)

Writing space

MOU-S09-C15 | Grade 5 | Volumes of Solid Figures

5.MD.C.5 | word problem

A solid joins two prisms without overlap. Their dimensions are 3 by 3 by 3 and 2 by 3 by 2. Find the total volume.

Writing space

Session 9

MOU-S09-C16 | Grade 5 | Fractions as Quotients 5.NF.B.3 | word problem

6 identical sandwiches are shared equally by 6 children. What fraction of a sandwich does each child get?

Writing space

MOU-S09-C17 | Grade 5 | Fractions of Whole Numbers 5.NF.B.4 | word problem

3/4 of 16 students choose art. How many students choose art?

Writing space

MOU-S09-C18 | Grade 5 | Area and Fractional Side Lengths 5.NF.B.4 | word problem

A rectangle is 4/5 meter long and 2/2 meters wide. What is its area in square meters?

Writing space

Session 9

MOU-S09-C19 | Grade 4 | Fraction Comparison

4.NF.A.2 | reasoning

Which fraction is greater: 1/2 or 1/4? Choose one answer.

- A. 1/4
- B. 1/2

Writing space

MOU-S09-C20 | Grade 4 | Equal Groups of Fractions

4.NF.B.4 | word problem

3 servings use 1/1 cup of oats altogether. Each serving uses the same amount. How much does one serving use?

Writing space

MOU-S09-C21 | Grade 4 | Addition and Subtraction of Fractions

4.NF.B.3 | word problem

Ben has 5/3 meters of string and uses 2/3 meter. How much remains?

Writing space

Session 9

MOU-S09-C22 | Grade 4 | Addition of Tenths and Hundredths

4.NF.C.5 | word problem

Complete: 4/10 + ?/100 = 44/100. Give the missing numerator.

Writing space

Session 9

MOU-S09-F01 | Grade 4 | Fast facts: Addition 4.NBT.B.4 | fluency

___ + 989 = 4428. Find the missing addend.

Writing space

MOU-S09-F02 | Grade 4 | Fast facts: Subtraction 4.NBT.B.4 | fluency

4106 - ___ = 3628. Find the missing amount.

Writing space

MOU-S09-F03 | Grade 5 | Fast facts: Multiplication 5.NBT.B.5 | fluency

Complete 126 x 27 = ___ using division to check.

Writing space

MOU-S09-F04 | Grade 5 | Fast facts: Division 5.NBT.B.6 | fluency

Find 3422 / 29 using multiplication to check.

Writing space

MOU-S09-F05 | Grade 5 | Fast facts: Addition 5.NBT.B.7 | fluency

___ + 0.5 = 1.8. Find the missing addend.

Writing space

MOU-S09-F06 | Grade 5 | Fast facts: Subtraction 5.NBT.B.7 | fluency

2.0 - ___ = 1.6. Find the missing amount.

Writing space

MOU-S09-F07 | Grade 5 | Fast facts: Multiplication 5.NBT.B.5 | fluency

Find 202 x 19 using a related fact.

Writing space

MOU-S09-F08 | Grade 5 | Fast facts: Division 5.NBT.B.6 | fluency

Find 1806 / 21.

Writing space

Session 10

MOU-S10-C01 | Grade 5 | Fraction Multiplication

5.NF.B.4 | word problem

A rectangle is 3/4 meter long and 5/2 meters wide. What is its area in square meters?

Writing space

MOU-S10-C02 | Grade 5 | Fraction Division

5.NF.B.7 | word problem

3 meters of ribbon are cut into pieces of length 1/5 meter. How many pieces are made?

Writing space

MOU-S10-C03 | Grade 5 | Problem Solving with Fractions

5.NF.B.7 | word problem

A recipe uses 1/5 cup of oil. Leo makes half a recipe. How many cups of oil are needed?

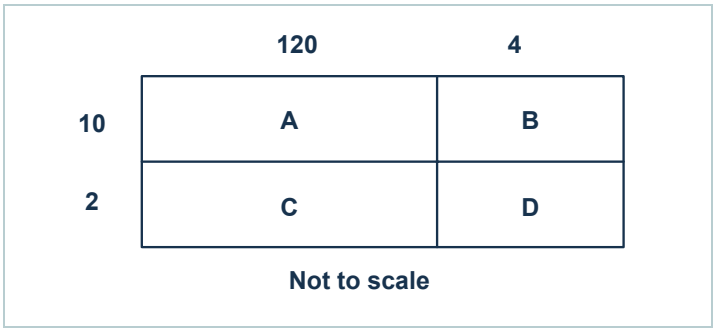
Writing space

Session 10

MOU-S10-C04 | Grade 5 | Multi-digit Multiplication Using the Standard Algorithm

5.NBT.B.5 | word problem

Use the area model to find the whole product.



Writing space

MOU-S10-C05 | Grade 5 | Multi-digit Division Using Partial Quotients

5.NBT.B.6 | word problem

286 tiles fill boxes of 13. How many boxes are filled? Use partial quotients.

Writing space

MOU-S10-C06 | Grade 5 | Let's Put It to Work

5.NBT.B.6 | word problem

35 boxes each contain 15 books. 75 books are donated. How many remain?

Writing space

Session 10

MOU-S10-C07 | Grade 5 | Numbers to Thousandths

5.NBT.A.3 | word problem

A number is 3 tenths plus 4 thousandths. Write it as a decimal.

Writing space

MOU-S10-C08 | Grade 5 | Add and Subtract Decimals

5.NBT.B.7 | word problem

Two ropes are 6.37 meters and 0.48 meter long. What is their combined length?

Writing space

MOU-S10-C09 | Grade 5 | Multiply Decimals

5.NBT.B.7 | word problem

Fabric costs $4.40 per meter. What is the cost of 0.5 meter, in dollars?

Writing space

MOU-S10-C10 | Grade 5 | Divide Decimals

5.NBT.B.7 | word problem

How many 0.2-meter pieces fit in 0.4 meters of ribbon?

Writing space

Session 10

MOU-S10-C11 | Grade 5 | Measurement Conversions and Powers of 10

5.MD.A.1 | explanation

A ribbon is 5.2 meters long. 20 centimeters are cut off. How many centimeters remain? Explain your reasoning and check your result.

Writing space

Session 10

MOU-S10-C12 | Grade 5 | Add and Subtract Fractions with Unlike Denominators

5.NF.A.1 | word problem

Add 1/2 and 1/12. Give a fraction.

Writing space

MOU-S10-C13 | Grade 5 | The Size of a Product

5.NF.B.5 | reasoning

Without multiplying, compare 6 × 4/3 with 6. Choose one answer.

- ○ **A.** The product is greater.
- ○ **B.** The product is less.

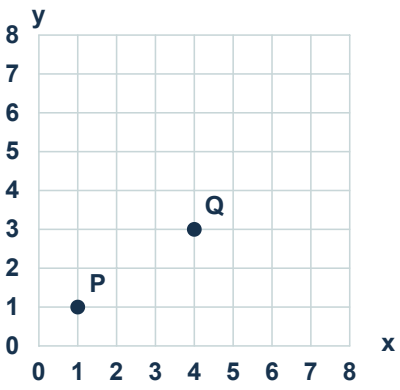
Writing space

Session 10

MOU-S10-C14 | Grade 5 | The Coordinate Grid

5.G.A.2 | word problem

Travel from P to Q using only right and up moves on grid lines. How many unit moves are needed?



Writing space

Session 10

MOU-S10-C15 | Grade 5 | The Hierarchy of Shapes

5.G.B.4 | reasoning

A shape is a rhombus. Which extra fact proves it is also a square? Choose one answer.

- ○ **A.** It has a right angle.
- ○ **B.** It has four sides.

Writing space

MOU-S10-C16 | Grade 5 | Numerical Patterns

5.OA.B.3 | word problem

Two patterns start at 5. A adds 5 each step. B adds 7. How far apart are their values after 5 steps?

Writing space

MOU-S10-C17 | Grade 5 | Multiply and Divide Whole Numbers

5.NBT.B.6 | word problem

33 boxes each contain 14 books. 42 books are donated. How many remain?

Writing space

Session 10

MOU-S10-C18 | Grade 5 | Apply Volume Concepts

5.MD.C.5 | word problem

A box is 6 by 2 by 4 units. A designer doubles only its height. How many additional unit cubes will fit?

Writing space

MOU-S10-C19 | Grade 4 | Decimals with Tenths and Hundredths

4.NF.C.6 | word problem

How many hundredths are in 0.4?

Writing space

MOU-S10-C20 | Grade 4 | Place Value Relationships through 1,000,000

4.NBT.A.1 | word problem

In 25000, move the digit 2 one place right. The original digit value is how many times the new value?

Writing space

MOU-S10-C21 | Grade 4 | Compare, Order, and Round

4.NBT.A.3 | word problem

A town reports 50567 people. Round to the nearest thousand.

Writing space

Session 10

MOU-S10-C22 | Grade 4 | Add and Subtract

4.NBT.B.4 | word problem

Ben has 30976 museum tickets. 23702 are red and the rest are blue. How many are blue?

Writing space

Session 10

MOU-S10-F01 | Grade 4 | Fast facts: Addition
4.NBT.B.4 | fluency

2466 + ___ = 3282. Find the missing addend.

Writing space

MOU-S10-F02 | Grade 4 | Fast facts: Subtraction
4.NBT.B.4 | fluency

Find 3668 - 1009 using an inverse operation.

Writing space

MOU-S10-F03 | Grade 5 | Fast facts: Multiplication
5.NBT.B.5 | fluency

Find 179 x 21 using a related fact.

Writing space

MOU-S10-F04 | Grade 5 | Fast facts: Division
5.NBT.B.6 | fluency

31 is a factor of 3503. What other factor completes the pair?

Writing space

MOU-S10-F05 | Grade 5 | Fast facts: Addition
5.NBT.B.7 | fluency

1.0 + ___ = 1.3. Find the missing addend.

Writing space

MOU-S10-F06 | Grade 5 | Fast facts: Subtraction
5.NBT.B.7 | fluency

Find 1.5 - 0.2 using a related addition fact.

Writing space

MOU-S10-F07 | Grade 5 | Fast facts: Multiplication
5.NBT.B.5 | fluency

Find 162 x 31.

Writing space

MOU-S10-F08 | Grade 5 | Fast facts: Division
5.NBT.B.6 | fluency

___ / 22 = 128. Find the dividend.

Writing space

Session 11

MOU-S11-C01 | Grade 5 | Fraction and Decimal Operations

5.NBT.B.7 | word problem

Add 4/2 and 0.25. Give a decimal.

Writing space

MOU-S11-C02 | Grade 5 | Creation and Design

5.MD.C.5 | word problem

A box is 2 by 3 by 4 units. A designer doubles only its height. How many additional unit cubes will fit?

Writing space

MOU-S11-C03 | Grade 5 | Unit Cubes and Volume

5.MD.C.4 | word problem

A prism has 12 cubes in each layer and volume 36 cubic units. How many layers are there?

Writing space

MOU-S11-C04 | Grade 5 | Expressions for Finding Volume

5.MD.C.5 | word problem

A prism has 8 cubes in each layer and volume 24 cubic units. How many layers are there?

Writing space

Session 11

MOU-S11-C05 | Grade 5 | Volumes of Solid Figures

5.MD.C.5 | word problem

Two non-overlapping prisms make a solid of volume 76. One prism has dimensions 5 by 4 by 3. What is the other prism's volume?

Writing space

MOU-S11-C06 | Grade 5 | Fractions as Quotients

5.NF.B.3 | word problem

3 liters of juice are shared equally among 8 pitchers. How much goes in each pitcher? Give a fraction.

Writing space

MOU-S11-C07 | Grade 5 | Fractions of Whole Numbers

5.NF.B.4 | word problem

Jude says 4/5 of 30 is 29. Find the correct value.

Writing space

Session 11

MOU-S11-C08 | Grade 5 | Area and Fractional Side Lengths

5.NF.B.4 | word problem

A rectangle is tiled with squares that each have area 1/4 square meter. There are 1 rows of 4 tiles. Find the area of the rectangle.



Writing space

MOU-S11-C09 | Grade 5 | Fraction Multiplication

5.NF.B.4 | word problem

A strip has 2/3 shaded. 1/2 of that shaded part is crosshatched. What fraction of the original whole is crosshatched?

Writing space

MOU-S11-C10 | Grade 5 | Fraction Division

5.NF.B.7 | word problem

1/3 liter is shared equally among 5 cups. How much goes in each cup? Give a fraction.

Writing space

Session 11

MOU-S11-C11 | Grade 5 | Problem Solving with Fractions

5.NF.B.7 | explanation

Leo has 3 liters of soup. After using 1 liter, the rest fills 1/4-liter bowls. How many bowls are filled? Explain your reasoning and check your result.

Writing space

Session 11

MOU-S11-C12 | Grade 5 | Multi-digit Multiplication Using the Standard Algorithm 5.NBT.B.5 | word problem

In the standard algorithm for 126 × 14, what is the partial product from the tens digit of 14?

Writing space

MOU-S11-C13 | Grade 5 | Multi-digit Division Using Partial Quotients 5.NBT.B.6 | word problem

To divide 360 by 15, Omar subtracts 300. What partial quotient is still needed?

Writing space

MOU-S11-C14 | Grade 5 | Let's Put It to Work 5.NBT.B.6 | word problem

A school has 449 students. Each bus holds 14. What is the fewest number of buses needed?

Writing space

MOU-S11-C15 | Grade 5 | Numbers to Thousandths 5.NBT.A.3 | word problem

How many thousandths are in 0.5?

Writing space

Session 11

MOU-S11-C16 | Grade 5 | Add and Subtract Decimals

5.NBT.B.7 | word problem

A jug contains 3.37 liters. Some is poured out, leaving 2.99 liters. How much was poured out?

Writing space

MOU-S11-C17 | Grade 5 | Multiply Decimals

5.NBT.B.7 | word problem

A calculator shows 72 for 24 × 3. What is 2.4 × 0.3?

Writing space

MOU-S11-C18 | Grade 5 | Divide Decimals

5.NBT.B.7 | word problem

1.6 liters fill 4 equal bottles. How many liters are in each bottle?

Writing space

MOU-S11-C19 | Grade 4 | Multiplicative Comparison

4.OA.A.2 | word problem

Omar has 6 cards, which is 2 times as many as Sara. How many cards does Sara have?

Writing space

Session 11

MOU-S11-C20 | Grade 4 | Measurement Conversion

4.MD.A.1 | word problem

A ribbon is 6000 millimeters long. What is its length in meters?

Writing space

MOU-S11-C21 | Grade 4 | Let's Put It to Work

4.MD.A.3 | word problem

A rectangular garden is 9 m long and 5 m wide. A gate leaves 3 m of its boundary unfenced. How many meters of fence are needed?

Writing space

MOU-S11-C22 | Grade 4 | Features of Patterns

4.OA.C.5 | reasoning

A pattern starts at 6 and adds 8 each time. What stays true? Choose one answer.

- ○ **A.** Every term is odd.
- ○ **B.** Every term is even.

Writing space

Session 11

MOU-S11-F01 | Grade 4 | Fast facts: Addition 4.NBT.B.4 | fluency

Complete 2997 + 647 = ___ using an inverse operation.

Writing space

MOU-S11-F02 | Grade 4 | Fast facts: Subtraction 4.NBT.B.4 | fluency

Find 4022 - 836 using a related addition fact.

Writing space

MOU-S11-F03 | Grade 5 | Fast facts: Multiplication 5.NBT.B.5 | fluency

One factor of 4309 is 139. What is the other factor?

Writing space

MOU-S11-F04 | Grade 5 | Fast facts: Division 5.NBT.B.6 | fluency

Find 3564 / 33 using a related multiplication fact.

Writing space

MOU-S11-F05 | Grade 5 | Fast facts: Addition 5.NBT.B.7 | fluency

Find 1.5 + 0.1 using a fact or place-value pattern.

Writing space

MOU-S11-F06 | Grade 5 | Fast facts: Subtraction 5.NBT.B.7 | fluency

Find 1.5 - 0.5.

Writing space

MOU-S11-F07 | Grade 5 | Fast facts: Multiplication 5.NBT.B.5 | fluency

___ x 23 = 4945. Find the missing factor.

Writing space

MOU-S11-F08 | Grade 5 | Fast facts: Division 5.NBT.B.6 | fluency

2952 / ___ = 123. Find the divisor.

Writing space

Session 12

MOU-S12-C01 | Grade 5 | Measurement Conversions and Powers of 10

5.MD.A.1 | word problem

A ribbon is 2400 millimeters long. What is its length in meters?

Writing space

MOU-S12-C02 | Grade 5 | Add and Subtract Fractions with Unlike Denominators

5.NF.A.1 | word problem

A walk is 1/2 mile. Omar has walked 1/18 mile. How much remains?

Writing space

MOU-S12-C03 | Grade 5 | The Size of a Product

5.NF.B.5 | reasoning

Which products are less than 3? Select all that apply.

- □ **A.** 3 × 3/4
- □ **B.** 3 × 1
- □ **C.** 3 × 2/3

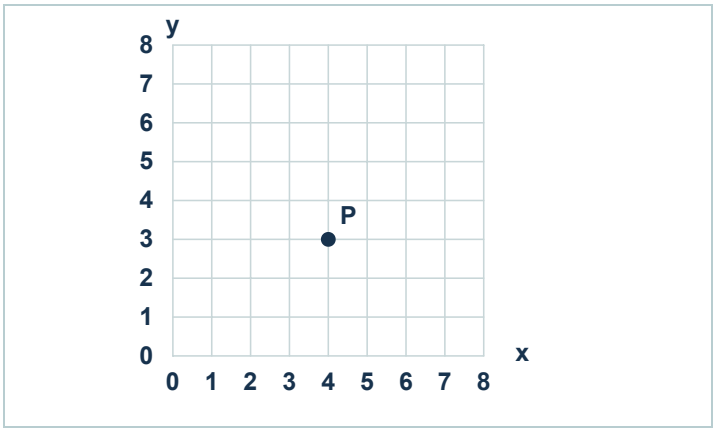
Writing space

Session 12

MOU-S12-C04 | Grade 5 | The Coordinate Grid

5.G.A.2 | word problem

Point P moves 2 units right and 1 unit up. Give the new ordered pair.



Writing space

Session 12

MOU-S12-C05 | Grade 5 | The Hierarchy of Shapes

5.G.B.4 | reasoning

Which statements about triangles are always true? Choose one answer.

- ○ **A.** An equilateral triangle is isosceles.
- ○ **B.** Every isosceles triangle is equilateral.

Writing space

MOU-S12-C06 | Grade 5 | Numerical Patterns

5.OA.B.3 | word problem

Two patterns start at 0. Pattern A adds 3. Pattern B adds 6. At one step, A is 6. What is B at that step?

Writing space

MOU-S12-C07 | Grade 5 | Multiply and Divide Whole Numbers

5.NBT.B.6 | word problem

A school has 526 students. Each bus holds 15. What is the fewest number of buses needed?

Writing space

Session 12

MOU-S12-C08 | Grade 5 | Apply Volume Concepts

5.MD.C.5 | word problem

Design a box with volume 48 cubic units, length 3, and width 4. What height meets these requirements?

Writing space

MOU-S12-C09 | Grade 5 | Fraction and Decimal Operations

5.NBT.B.7 | word problem

A bottle holds 6.75 liters. 6.25 liters are used. Give the remaining amount as a fraction of a liter.

Writing space

MOU-S12-C10 | Grade 5 | Creation and Design

5.MD.C.5 | word problem

Design a box with volume 80 cubic units, length 4, and width 5. What height meets these requirements?

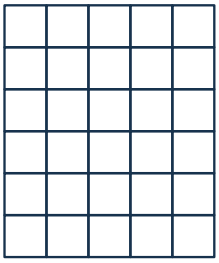
Writing space

Session 12

MOU-S12-C11 | Grade 5 | Unit Cubes and Volume

5.MD.C.4 | explanation

This drawing shows the bottom layer of a prism. There are 3 full layers. How many unit cubes fill the prism? Explain your reasoning and check your result.



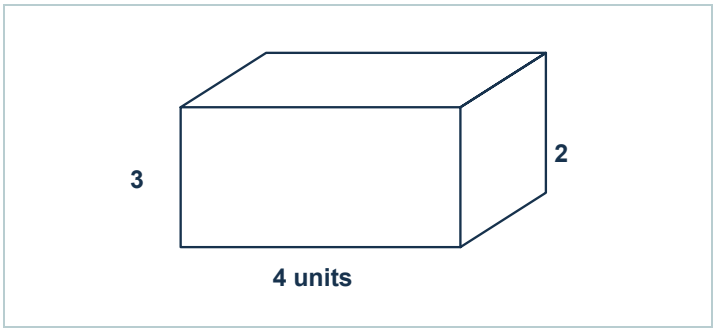
Writing space

Session 12

MOU-S12-C12 | Grade 5 | Expressions for Finding Volume

5.MD.C.5 | reasoning

Which expressions give the volume of this prism? Select all that apply.



- □ **A.** (4 × 2) × 3
- □ **B.** 4 + 2 + 3
- □ **C.** 4 × (2 × 3)

Writing space

MOU-S12-C13 | Grade 5 | Volumes of Solid Figures

5.MD.C.5 | word problem

A solid joins two prisms without overlap. Their dimensions are 2 by 3 by 3 and 2 by 3 by 2. Find the total volume.

Writing space

Session 12

MOU-S12-C14 | Grade 5 | Fractions as Quotients

5.NF.B.3 | word problem

5 identical sandwiches are shared equally by 6 children. What fraction of a sandwich does each child get?

Writing space

MOU-S12-C15 | Grade 5 | Fractions of Whole Numbers

5.NF.B.4 | word problem

3/4 of 12 students choose art. How many students choose art?

Writing space

MOU-S12-C16 | Grade 5 | Area and Fractional Side Lengths

5.NF.B.4 | word problem

A rectangle is 3/4 meter long and 6/2 meters wide. What is its area in square meters?

Writing space

MOU-S12-C17 | Grade 5 | Fraction Multiplication

5.NF.B.4 | word problem

A rectangle is 4/5 meter long and 4/2 meters wide. What is its area in square meters?

Writing space

Session 12

MOU-S12-C18 | Grade 5 | Fraction Division

5.NF.B.7 | word problem

2 meters of ribbon are cut into pieces of length 1/2 meter. How many pieces are made?

Writing space

MOU-S12-C19 | Grade 4 | Multi-Digit Multiplication

4.NBT.B.5 | word problem

In the standard algorithm for 32 × 14, what is the partial product from the tens digit of 14?

Writing space

MOU-S12-C20 | Grade 4 | Multi-Digit Division

4.NBT.B.6 | word problem

To divide 100 by 4, Omar subtracts 80. What partial quotient is still needed?

Writing space

MOU-S12-C21 | Grade 4 | Let's Put It to Work: Problem Solving with Large Numbers

4.OA.A.3 | word problem

A school has 166 students. Each bus holds 5. What is the fewest number of buses needed?

Writing space

Session 12

MOU-S12-C22 | Grade 4 | Points, Lines, Segments, Rays, and Angles

4.G.A.1 | reasoning

Which descriptions name figures that extend forever in at least one direction? Select all that apply.

- ☐ **A.** A ray
- ☐ **B.** A line segment
- ☐ **C.** A line

Writing space

Session 12

MOU-S12-F01 | Grade 4 | Fast facts: Addition
4.NBT.B.4 | fluency

Find 3528 + 478 using a fact or place-value pattern.

Writing space

MOU-S12-F02 | Grade 4 | Fast facts: Subtraction
4.NBT.B.4 | fluency

___ - 667 = 3717. Find the starting number.

Writing space

MOU-S12-F03 | Grade 5 | Fast facts: Multiplication
5.NBT.B.5 | fluency

Find 192 x 24 by breaking apart a factor.

Writing space

MOU-S12-F04 | Grade 5 | Fast facts: Division
5.NBT.B.6 | fluency

Find 3605 / 35 using multiplication to check.

Writing space

MOU-S12-F05 | Grade 5 | Fast facts: Addition
5.NBT.B.7 | fluency

Find 1.2 + 0.4.

Writing space

MOU-S12-F06 | Grade 5 | Fast facts: Subtraction
5.NBT.B.7 | fluency

___ - 0.3 = 1.5. Find the starting number.

Writing space

MOU-S12-F07 | Grade 5 | Fast facts: Multiplication
5.NBT.B.5 | fluency

175 x ___ = 5950. Find the missing factor.

Writing space

MOU-S12-F08 | Grade 5 | Fast facts: Division
5.NBT.B.6 | fluency

Find 3068 / 26 using multiplication to check.

Writing space

Session 13

MOU-S13-C01 | Grade 5 | Problem Solving with Fractions

5.NF.B.7 | word problem

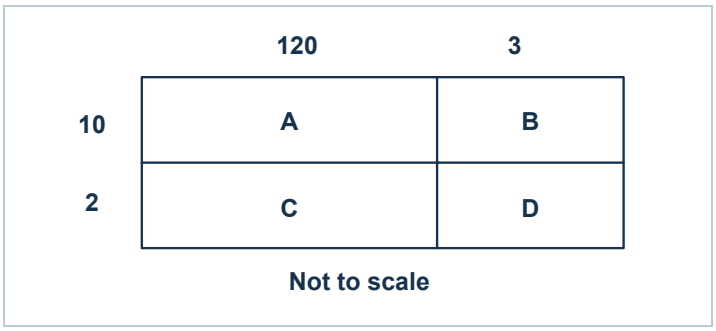
A recipe uses 1/5 cup of oil. Noor makes half a recipe. How many cups of oil are needed?

Writing space

MOU-S13-C02 | Grade 5 | Multi-digit Multiplication Using the Standard Algorithm

5.NBT.B.5 | word problem

Use the area model to find the whole product.



Writing space

MOU-S13-C03 | Grade 5 | Multi-digit Division Using Partial Quotients

5.NBT.B.6 | word problem

312 tiles fill boxes of 12. How many boxes are filled? Use partial quotients.

Writing space

Session 13

MOU-S13-C04 | Grade 5 | Let's Put It to Work

5.NBT.B.6 | word problem

34 boxes each contain 15 books. 60 books are donated. How many remain?

Writing space

MOU-S13-C05 | Grade 5 | Numbers to Thousandths

5.NBT.A.3 | word problem

A number is 2 tenths plus 4 thousandths. Write it as a decimal.

Writing space

MOU-S13-C06 | Grade 5 | Add and Subtract Decimals

5.NBT.B.7 | word problem

Two ropes are 5.37 meters and 0.48 meter long. What is their combined length?

Writing space

MOU-S13-C07 | Grade 5 | Multiply Decimals

5.NBT.B.7 | word problem

Fabric costs $3.40 per meter. What is the cost of 0.5 meter, in dollars?

Writing space

Session 13

MOU-S13-C08 | Grade 5 | Divide Decimals

5.NBT.B.7 | word problem

How many 0.5-meter pieces fit in 3 meters of ribbon?

Writing space

MOU-S13-C09 | Grade 5 | Measurement Conversions and Powers of 10

5.MD.A.1 | word problem

A ribbon is 4.2 meters long. 20 centimeters are cut off. How many centimeters remain?

Writing space

MOU-S13-C10 | Grade 5 | Add and Subtract Fractions with Unlike Denominators

5.NF.A.1 | word problem

Add 1/2 and 1/10. Give a fraction.

Writing space

Session 13

MOU-S13-C11 | Grade 5 | The Size of a Product

5.NF.B.5 | reasoning

Without multiplying, compare 5 × 4/3 with 5. Choose one answer.

- ○ **A.** The product is greater.
- ○ **B.** The product is less.

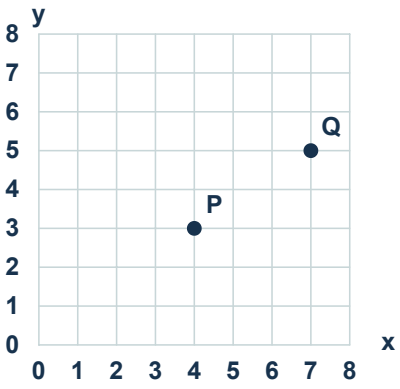
Writing space

Session 13

MOU-S13-C12 | Grade 5 | The Coordinate Grid

5.G.A.2 | explanation

Travel from P to Q using only right and up moves on grid lines. How many unit moves are needed? Explain your reasoning and check your result.



Writing space

Session 13

MOU-S13-C13 | Grade 5 | The Hierarchy of Shapes

5.G.B.4 | reasoning

Which group is contained entirely inside the parallelogram group? Choose one answer.

- ○ **A.** Rectangles
- ○ **B.** All quadrilaterals

Writing space

MOU-S13-C14 | Grade 5 | Numerical Patterns

5.OA.B.3 | word problem

Two patterns start at 4. A adds 5 each step. B adds 7. How far apart are their values after 4 steps?

Writing space

MOU-S13-C15 | Grade 5 | Multiply and Divide Whole Numbers

5.NBT.B.6 | word problem

32 boxes each contain 14 books. 28 books are donated. How many remain?

Writing space

Session 13

MOU-S13-C16 | Grade 5 | Apply Volume Concepts

5.MD.C.5 | word problem

A box is 5 by 2 by 4 units. A designer doubles only its height. How many additional unit cubes will fit?

Writing space

MOU-S13-C17 | Grade 5 | Fraction and Decimal Operations

5.NBT.B.7 | word problem

Add 3/2 and 0.25. Give a decimal.

Writing space

MOU-S13-C18 | Grade 5 | Creation and Design

5.MD.C.5 | word problem

A box is 6 by 3 by 4 units. A designer doubles only its height. How many additional unit cubes will fit?

Writing space

MOU-S13-C19 | Grade 4 | The Size of an Angle

4.MD.C.5 | word problem

A full turn is split into 6 equal angles. How many degrees are in one angle?

Writing space

Session 13

MOU-S13-C20 | Grade 4 | Angle Analysis 4.MD.C.7 | word problem

Two adjacent angles make a straight angle. One measures 40 degrees. Find the other.

Writing space

MOU-S13-C21 | Grade 4 | Side Lengths, Angles, and Lines of Symmetry 4.G.A.3 | reasoning

A rectangle is not a square. Which fold always matches its two halves? Choose one answer.

- ○ **A.** A diagonal.
- ○ **B.** A line through the midpoints of opposite sides.

Writing space

MOU-S13-C22 | Grade 4 | Reason about Attributes to Solve Problems 4.G.A.2 | reasoning

A quadrilateral has four equal sides but no right angles. Which name must fit? Choose one answer.

- ○ **A.** Rectangle
- ○ **B.** Rhombus

Writing space

Session 13

MOU-S13-F01 | Grade 4 | Fast facts: Addition

4.NBT.B.4 | fluency

___ + 1009 = 3568. Find the missing addend.

Writing space

MOU-S13-F02 | Grade 4 | Fast facts: Subtraction

4.NBT.B.4 | fluency

3246 - ___ = 2748. Find the missing amount.

Writing space

MOU-S13-F03 | Grade 5 | Fast facts: Multiplication

5.NBT.B.5 | fluency

Find 152 x 35 using a related fact.

Writing space

MOU-S13-F04 | Grade 5 | Fast facts: Division

5.NBT.B.6 | fluency

Find 2058 / 21.

Writing space

MOU-S13-F05 | Grade 5 | Fast facts: Addition

5.NBT.B.7 | fluency

___ + 0.2 = 1.9. Find the missing addend.

Writing space

MOU-S13-F06 | Grade 5 | Fast facts: Subtraction

5.NBT.B.7 | fluency

1.3 - ___ = 1.2. Find the missing amount.

Writing space

MOU-S13-F07 | Grade 5 | Fast facts: Multiplication

5.NBT.B.5 | fluency

Complete 135 x 27 = ___ using division to check.

Writing space

MOU-S13-F08 | Grade 5 | Fast facts: Division

5.NBT.B.6 | fluency

Find 3164 / 28 using multiplication to check.

Writing space

Session 14

MOU-S14-C01 | Grade 5 | Unit Cubes and Volume

5.MD.C.4 | word problem

A prism has 9 cubes in each layer and volume 27 cubic units. How many layers are there?

Writing space

MOU-S14-C02 | Grade 5 | Expressions for Finding Volume

5.MD.C.5 | word problem

A prism has 18 cubes in each layer and volume 54 cubic units. How many layers are there?

Writing space

MOU-S14-C03 | Grade 5 | Volumes of Solid Figures

5.MD.C.5 | word problem

Two non-overlapping prisms make a solid of volume 64. One prism has dimensions 4 by 4 by 3. What is the other prism's volume?

Writing space

MOU-S14-C04 | Grade 5 | Fractions as Quotients

5.NF.B.3 | word problem

2 liters of juice are shared equally among 8 pitchers. How much goes in each pitcher? Give a fraction.

Writing space

Session 14

MOU-S14-C05 | Grade 5 | Fractions of Whole Numbers

5.NF.B.4 | word problem

Sara says 4/5 of 25 is 24. Find the correct value.

Writing space

MOU-S14-C06 | Grade 5 | Area and Fractional Side Lengths

5.NF.B.4 | word problem

A rectangle is tiled with squares that each have area 1/4 square meter. There are 1 rows of 3 tiles. Find the area of the rectangle.



Writing space

MOU-S14-C07 | Grade 5 | Fraction Multiplication

5.NF.B.4 | word problem

A strip has 1/2 shaded. 5/6 of that shaded part is crosshatched. What fraction of the original whole is crosshatched?

Writing space

Session 14

MOU-S14-C08 | Grade 5 | Fraction Division

5.NF.B.7 | word problem

1/3 liter is shared equally among 4 cups. How much goes in each cup? Give a fraction.

Writing space

MOU-S14-C09 | Grade 5 | Problem Solving with Fractions

5.NF.B.7 | word problem

Noor has 2 liters of soup. After using 1 liter, the rest fills 1/4-liter bowls. How many bowls are filled?

Writing space

MOU-S14-C10 | Grade 5 | Multi-digit Multiplication Using the Standard Algorithm

5.NBT.B.5 | word problem

In the standard algorithm for 125 × 14, what is the partial product from the tens digit of 14?

Writing space

Session 14

MOU-S14-C11 | Grade 5 | Multi-digit Division Using Partial Quotients

5.NBT.B.6 | explanation

To divide 345 by 15, Sofia subtracts 300. What partial quotient is still needed? Explain your reasoning and check your result.

Writing space

Session 14

MOU-S14-C12 | Grade 5 | Let's Put It to Work

5.NBT.B.6 | word problem

A school has 613 students. Each bus holds 17. What is the fewest number of buses needed?

Writing space

MOU-S14-C13 | Grade 5 | Numbers to Thousandths

5.NBT.A.3 | word problem

How many thousandths are in 0.4?

Writing space

MOU-S14-C14 | Grade 5 | Add and Subtract Decimals

5.NBT.B.7 | word problem

A jug contains 2.37 liters. Some is poured out, leaving 1.99 liters. How much was poured out?

Writing space

MOU-S14-C15 | Grade 5 | Multiply Decimals

5.NBT.B.7 | word problem

A calculator shows 60 for 20 × 3. What is 2 × 0.3?

Writing space

Session 14

MOU-S14-C16 | Grade 5 | Divide Decimals

5.NBT.B.7 | word problem

1.2 liters fill 3 equal bottles. How many liters are in each bottle?

Writing space

MOU-S14-C17 | Grade 5 | Measurement Conversions and Powers of 10

5.MD.A.1 | word problem

A ribbon is 6400 millimeters long. What is its length in meters?

Writing space

MOU-S14-C18 | Grade 5 | Add and Subtract Fractions with Unlike Denominators

5.NF.A.1 | word problem

A walk is 1/2 mile. Omar has walked 1/18 mile. How much remains?

Writing space

Session 14

MOU-S14-C19 | Grade 4 | Reason with Fractions

4.NF.A.2 | reasoning

Which fraction is greater: 2/3 or 2/5? Choose one answer.

- ○ **A.** 2/5
- ○ **B.** 2/3

Writing space

MOU-S14-C20 | Grade 4 | Whole-Number Operations

4.NBT.B.4 | word problem

Leo has 31250 museum tickets. 23702 are red and the rest are blue. How many are blue?

Writing space

MOU-S14-C21 | Grade 4 | Solve Problems with Multiplication and Division

4.OA.A.3 | word problem

A school has 145 students. Each bus holds 4. What is the fewest number of buses needed?

Writing space

Session 14

MOU-S14-C22 | Grade 4 | Creation and Design

4.MD.A.3 | word problem

A rectangular garden is 9 m long and 7 m wide. A gate leaves 5 m of its boundary unfenced. How many meters of fence are needed?

Writing space

Session 14

MOU-S14-F01 | Grade 4 | Fast facts: Addition
4.NBT.B.4 | fluency

3086 + ___ = 3922. Find the missing addend.

Writing space

MOU-S14-F02 | Grade 4 | Fast facts: Subtraction
4.NBT.B.4 | fluency

Find 4308 - 1029 using a related addition fact.

Writing space

MOU-S14-F03 | Grade 5 | Fast facts: Multiplication
5.NBT.B.5 | fluency

Find 205 x 28.

Writing space

MOU-S14-F04 | Grade 5 | Fast facts: Division
5.NBT.B.6 | fluency

___ / 22 = 93. Find the dividend.

Writing space

MOU-S14-F05 | Grade 5 | Fast facts: Addition
5.NBT.B.7 | fluency

1.4 + ___ = 1.9. Find the missing addend.

Writing space

MOU-S14-F06 | Grade 5 | Fast facts: Subtraction
5.NBT.B.7 | fluency

Find 2.1 - 0.4 using an inverse operation.

Writing space

MOU-S14-F07 | Grade 5 | Fast facts: Multiplication
5.NBT.B.5 | fluency

Find 188 x 21 using a related fact.

Writing space

MOU-S14-F08 | Grade 5 | Fast facts: Division
5.NBT.B.6 | fluency

31 is a factor of 3348. What other factor completes the pair?

Writing space

Session 15

MOU-S15-C01 | Grade 5 | The Size of a Product

5.NF.B.5 | reasoning

Which products are less than 2? Select all that apply.

- ☐ **A.** 2 × 3/4
- ☐ **B.** 2 × 1
- ☐ **C.** 2 × 2/3

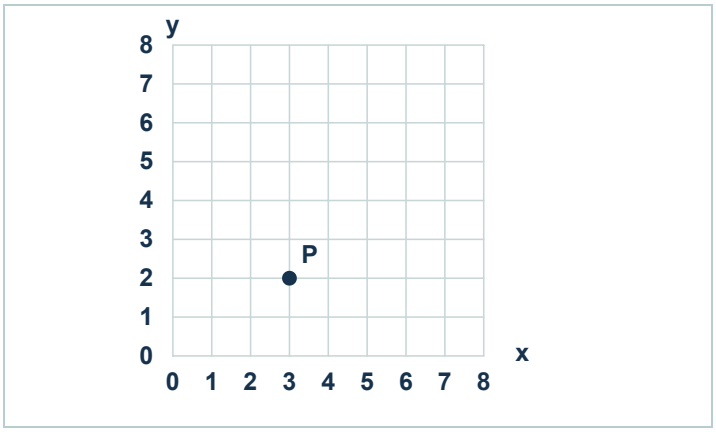
Writing space

Session 15

MOU-S15-C02 | Grade 5 | The Coordinate Grid

5.G.A.2 | word problem

Point P moves 2 units right and 1 unit up. Give the new ordered pair.



Writing space

Session 15

MOU-S15-C03 | Grade 5 | The Hierarchy of Shapes

5.G.B.4 | reasoning

Which attributes are shared by every square and every rhombus? Select all that apply.

- ☐ **A.** Four equal sides
- ☐ **B.** Two pairs of parallel sides
- ☐ **C.** Four right angles

Writing space

MOU-S15-C04 | Grade 5 | Numerical Patterns

5.OA.B.3 | word problem

Two patterns start at 0. Pattern A adds 2. Pattern B adds 4. At one step, A is 12. What is B at that step?

Writing space

MOU-S15-C05 | Grade 5 | Multiply and Divide Whole Numbers

5.NBT.B.6 | word problem

A school has 511 students. Each bus holds 15. What is the fewest number of buses needed?

Writing space

Session 15

MOU-S15-C06 | Grade 5 | Apply Volume Concepts

5.MD.C.5 | word problem

Design a box with volume 32 cubic units, length 2, and width 4. What height meets these requirements?

Writing space

MOU-S15-C07 | Grade 5 | Fraction and Decimal Operations

5.NBT.B.7 | word problem

A bottle holds 5.75 liters. 5.25 liters are used. Give the remaining amount as a fraction of a liter.

Writing space

MOU-S15-C08 | Grade 5 | Creation and Design

5.MD.C.5 | word problem

Design a box with volume 60 cubic units, length 3, and width 5. What height meets these requirements?

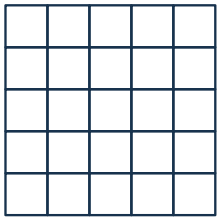
Writing space

Session 15

MOU-S15-C09 | Grade 5 | Unit Cubes and Volume

5.MD.C.4 | word problem

This drawing shows the bottom layer of a prism. There are 3 full layers. How many unit cubes fill the prism?



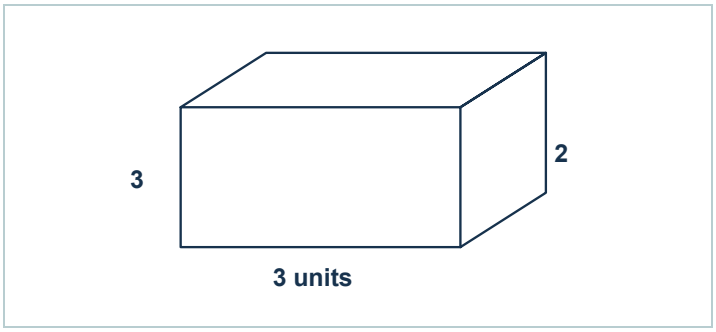
Writing space

Session 15

MOU-S15-C10 | Grade 5 | Expressions for Finding Volume

5.MD.C.5 | reasoning

Which expressions give the volume of this prism? Select all that apply.



- □ **A.** (3 × 2) × 3
- □ **B.** 3 + 2 + 3
- □ **C.** 3 × (2 × 3)

Writing space

Session 15

MOU-S15-C11 | Grade 5 | Volumes of Solid Figures

5.MD.C.5 | explanation

A solid joins two prisms without overlap. Their dimensions are 6 by 2 by 3 and 2 by 2 by 2. Find the total volume. Explain your reasoning and check your result.

Writing space

Session 15

MOU-S15-C12 | Grade 5 | Fractions as Quotients 5.NF.B.3 | word problem

4 identical sandwiches are shared equally by 6 children. What fraction of a sandwich does each child get?

Writing space

MOU-S15-C13 | Grade 5 | Fractions of Whole Numbers 5.NF.B.4 | word problem

3/4 of 8 students choose art. How many students choose art?

Writing space

MOU-S15-C14 | Grade 5 | Area and Fractional Side Lengths 5.NF.B.4 | word problem

A rectangle is 3/4 meter long and 5/2 meters wide. What is its area in square meters?

Writing space

MOU-S15-C15 | Grade 5 | Fraction Multiplication 5.NF.B.4 | word problem

A rectangle is 4/5 meter long and 3/2 meters wide. What is its area in square meters?

Writing space

Session 15

MOU-S15-C16 | Grade 5 | Fraction Division

5.NF.B.7 | word problem

6 meters of ribbon are cut into pieces of length 1/5 meter. How many pieces are made?

Writing space

MOU-S15-C17 | Grade 5 | Problem Solving with Fractions

5.NF.B.7 | word problem

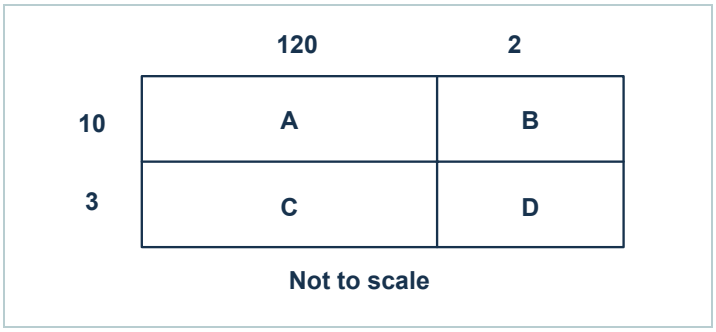
A recipe uses 1/2 cup of oil. Noor makes half a recipe. How many cups of oil are needed?

Writing space

MOU-S15-C18 | Grade 5 | Multi-digit Multiplication Using the Standard Algorithm

5.NBT.B.5 | word problem

Use the area model to find the whole product.



Writing space

Session 15

MOU-S15-C19 | Grade 4 | Understand Factors and Multiples

4.OA.B.4 | word problem

18 chairs form equal rows with no chairs left over. There are 6 rows. How many chairs are in each row?

Writing space

MOU-S15-C20 | Grade 4 | Find Factor Pairs and Multiples

4.OA.B.4 | word problem

36 chairs form equal rows with no chairs left over. There are 12 rows. How many chairs are in each row?

Writing space

MOU-S15-C21 | Grade 4 | Size and Location of Fractions

4.NF.A.1 | word problem

How much more of this whole must be shaded to make one whole? Give a fraction.



One whole

Writing space

Session 15

MOU-S15-C22 | Grade 4 | Equivalent Fractions

4.NF.A.1 | reasoning

Every part of a 3-part strip is split into 2 equal smaller parts. What happens to the shaded fraction? Choose one answer.

- ○ **A.** Its value stays the same.
- ○ **B.** Its value is multiplied by the number of new parts.

Writing space

Session 15

MOU-S15-F01 | Grade 4 | Fast facts: Addition — 4.NBT.B.4 | fluency

Find 3617 + 667 using a fact or place-value pattern.

Writing space

MOU-S15-F02 | Grade 4 | Fast facts: Subtraction — 4.NBT.B.4 | fluency

Find 4662 - 856.

Writing space

MOU-S15-F03 | Grade 5 | Fast facts: Multiplication — 5.NBT.B.5 | fluency

___ x 21 = 3465. Find the missing factor.

Writing space

MOU-S15-F04 | Grade 5 | Fast facts: Division — 5.NBT.B.6 | fluency

2112 / ___ = 88. Find the divisor.

Writing space

MOU-S15-F05 | Grade 5 | Fast facts: Addition — 5.NBT.B.7 | fluency

Complete 1.1 + 0.3 = ___ using an inverse operation.

Writing space

MOU-S15-F06 | Grade 5 | Fast facts: Subtraction — 5.NBT.B.7 | fluency

Find 1.6 - 0.2 using a related addition fact.

Writing space

MOU-S15-F07 | Grade 5 | Fast facts: Multiplication — 5.NBT.B.5 | fluency

One factor of 4588 is 148. What is the other factor?

Writing space

MOU-S15-F08 | Grade 5 | Fast facts: Division — 5.NBT.B.6 | fluency

Find 3296 / 32 using a related multiplication fact.

Writing space

Session 16

MOU-S16-C01 | Grade 5 | Multi-digit Division Using Partial Quotients

5.NBT.B.6 | word problem

300 tiles fill boxes of 12. How many boxes are filled? Use partial quotients.

Writing space

MOU-S16-C02 | Grade 5 | Let's Put It to Work

5.NBT.B.6 | word problem

33 boxes each contain 15 books. 45 books are donated. How many remain?

Writing space

MOU-S16-C03 | Grade 5 | Numbers to Thousandths

5.NBT.A.3 | word problem

A number is 6 tenths plus 3 thousandths. Write it as a decimal.

Writing space

MOU-S16-C04 | Grade 5 | Add and Subtract Decimals

5.NBT.B.7 | word problem

Two ropes are 4.37 meters and 0.48 meter long. What is their combined length?

Writing space

Session 16

MOU-S16-C05 | Grade 5 | Multiply Decimals

5.NBT.B.7 | word problem

Fabric costs $2.40 per meter. What is the cost of 0.5 meter, in dollars?

Writing space

MOU-S16-C06 | Grade 5 | Divide Decimals

5.NBT.B.7 | word problem

How many 0.5-meter pieces fit in 2.5 meters of ribbon?

Writing space

MOU-S16-C07 | Grade 5 | Measurement Conversions and Powers of 10

5.MD.A.1 | word problem

A ribbon is 3.2 meters long. 20 centimeters are cut off. How many centimeters remain?

Writing space

MOU-S16-C08 | Grade 5 | Add and Subtract Fractions with Unlike Denominators

5.NF.A.1 | word problem

Add 1/2 and 1/16. Give a fraction.

Writing space

Session 16

MOU-S16-C09 | Grade 5 | The Size of a Product

5.NF.B.5 | reasoning

Without multiplying, compare 4 × 4/3 with 4. Choose one answer.

- ○ **A.** The product is greater.
- ○ **B.** The product is less.

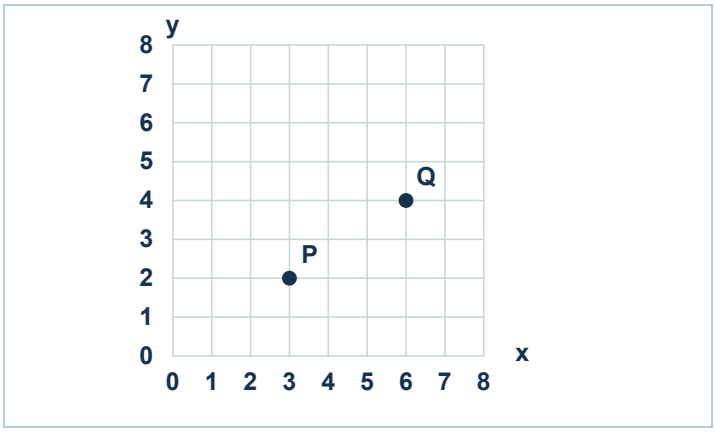
Writing space

Session 16

MOU-S16-C10 | Grade 5 | The Coordinate Grid

5.G.A.2 | word problem

Travel from P to Q using only right and up moves on grid lines. How many unit moves are needed?



Writing space

Session 16

MOU-S16-C11 | Grade 5 | The Hierarchy of Shapes 5.G.B.4 | reasoning

A rectangle has side lengths 3, 5, 3, and 5. Which group does it NOT belong to? Choose one answer.

- ○ **A.** Rhombuses
- ○ **B.** Parallelograms

Writing space

Session 16

MOU-S16-C12 | Grade 5 | Numerical Patterns

5.OA.B.3 | explanation

Two patterns start at 3. A adds 5 each step. B adds 7. How far apart are their values after 3 steps? Explain your reasoning and check your result.

Writing space

Session 16

MOU-S16-C13 | Grade 5 | Multiply and Divide Whole Numbers

5.NBT.B.6 | word problem

36 boxes each contain 17 books. 102 books are donated. How many remain?

Writing space

MOU-S16-C14 | Grade 5 | Apply Volume Concepts

5.MD.C.5 | word problem

A box is 4 by 2 by 4 units. A designer doubles only its height. How many additional unit cubes will fit?

Writing space

MOU-S16-C15 | Grade 5 | Fraction and Decimal Operations

5.NBT.B.7 | word problem

Add 2/2 and 0.25. Give a decimal.

Writing space

MOU-S16-C16 | Grade 5 | Creation and Design

5.MD.C.5 | word problem

A box is 5 by 3 by 4 units. A designer doubles only its height. How many additional unit cubes will fit?

Writing space

Session 16

MOU-S16-C17 | Grade 5 | Unit Cubes and Volume

5.MD.C.4 | word problem

A prism has 8 cubes in each layer and volume 24 cubic units. How many layers are there?

Writing space

MOU-S16-C18 | Grade 5 | Expressions for Finding Volume

5.MD.C.5 | word problem

A prism has 20 cubes in each layer and volume 60 cubic units. How many layers are there?

Writing space

MOU-S16-C19 | Grade 4 | Fraction Comparison

4.NF.A.2 | reasoning

Ribbon A is 5/6 meter long. Ribbon B is 1/2 meter long. Which ribbon is longer? Choose one answer.

- ○ **A.** Ribbon A
- ○ **B.** Ribbon B

Writing space

Session 16

MOU-S16-C20 | Grade 4 | Equal Groups of Fractions

4.NF.B.4 | word problem

Each of 5 bottles holds 1/3 liter. How many liters do they hold altogether?

Writing space

MOU-S16-C21 | Grade 4 | Addition and Subtraction of Fractions

4.NF.B.3 | word problem

A path is 6/4 kilometers long. Kai walks 3/4 kilometer. How much farther is the end?

Writing space

MOU-S16-C22 | Grade 4 | Addition of Tenths and Hundredths

4.NF.C.5 | word problem

Add 6/10 and 4/100. Give a fraction.

Writing space

Session 16

MOU-S16-F01 | Grade 4 | Fast facts: Addition
4.NBT.B.4 | fluency

Find 2648 + 498.

Writing space

MOU-S16-F02 | Grade 4 | Fast facts: Subtraction
4.NBT.B.4 | fluency

___ - 687 = 2837. Find the starting number.

Writing space

MOU-S16-F03 | Grade 5 | Fast facts: Multiplication
5.NBT.B.5 | fluency

125 x ___ = 4000. Find the missing factor.

Writing space

MOU-S16-F04 | Grade 5 | Fast facts: Division
5.NBT.B.6 | fluency

Find 2158 / 26 using multiplication to check.

Writing space

MOU-S16-F05 | Grade 5 | Fast facts: Addition
5.NBT.B.7 | fluency

Find 1.6 + 0.1 using a fact or place-value pattern.

Writing space

MOU-S16-F06 | Grade 5 | Fast facts: Subtraction
5.NBT.B.7 | fluency

___ - 0.5 = 1.1. Find the starting number.

Writing space

MOU-S16-F07 | Grade 5 | Fast facts: Multiplication
5.NBT.B.5 | fluency

Find 201 x 24 by breaking apart a factor.

Writing space

MOU-S16-F08 | Grade 5 | Fast facts: Division
5.NBT.B.6 | fluency

Find 3332 / 34 using multiplication to check.

Writing space

Session 17

MOU-S17-C01 | Grade 5 | Volumes of Solid Figures

5.MD.C.5 | word problem

Two non-overlapping prisms make a solid of volume 52. One prism has dimensions 3 by 4 by 3. What is the other prism's volume?

Writing space

MOU-S17-C02 | Grade 5 | Fractions as Quotients

5.NF.B.3 | word problem

6 liters of juice are shared equally among 7 pitchers. How much goes in each pitcher? Give a fraction.

Writing space

MOU-S17-C03 | Grade 5 | Fractions of Whole Numbers

5.NF.B.4 | word problem

Ben says 4/5 of 20 is 19. Find the correct value.

Writing space

Session 17

MOU-S17-C04 | Grade 5 | Area and Fractional Side Lengths

5.NF.B.4 | word problem

A rectangle is tiled with squares that each have area 1/4 square meter. There are 1 rows of 2 tiles. Find the area of the rectangle.



Writing space

MOU-S17-C05 | Grade 5 | Fraction Multiplication

5.NF.B.4 | word problem

A strip has 1/2 shaded. 4/5 of that shaded part is crosshatched. What fraction of the original whole is crosshatched?

Writing space

MOU-S17-C06 | Grade 5 | Fraction Division

5.NF.B.7 | word problem

1/3 liter is shared equally among 3 cups. How much goes in each cup? Give a fraction.

Writing space

Session 17

MOU-S17-C07 | Grade 5 | Problem Solving with Fractions

5.NF.B.7 | word problem

Zoe has 6 liters of soup. After using 1 liter, the rest fills 1/3-liter bowls. How many bowls are filled?

Writing space

MOU-S17-C08 | Grade 5 | Multi-digit Multiplication Using the Standard Algorithm

5.NBT.B.5 | word problem

In the standard algorithm for 124 × 14, what is the partial product from the tens digit of 14?

Writing space

MOU-S17-C09 | Grade 5 | Multi-digit Division Using Partial Quotients

5.NBT.B.6 | word problem

To divide 330 by 15, Leo subtracts 300. What partial quotient is still needed?

Writing space

MOU-S17-C10 | Grade 5 | Let's Put It to Work

5.NBT.B.6 | word problem

A school has 596 students. Each bus holds 17. What is the fewest number of buses needed?

Writing space

Session 17

MOU-S17-C11 | Grade 5 | Numbers to Thousandths

5.NBT.A.3 | explanation

How many thousandths are in 0.3? Explain your reasoning and check your result.

Writing space

Session 17

MOU-S17-C12 | Grade 5 | Add and Subtract Decimals

5.NBT.B.7 | word problem

A jug contains 6.37 liters. Some is poured out, leaving 6.09 liters. How much was poured out?

Writing space

MOU-S17-C13 | Grade 5 | Multiply Decimals

5.NBT.B.7 | word problem

A calculator shows 48 for 16 × 3. What is 1.6 × 0.3?

Writing space

MOU-S17-C14 | Grade 5 | Divide Decimals

5.NBT.B.7 | word problem

0.8 liters fill 2 equal bottles. How many liters are in each bottle?

Writing space

MOU-S17-C15 | Grade 5 | Measurement Conversions and Powers of 10

5.MD.A.1 | word problem

A ribbon is 5400 millimeters long. What is its length in meters?

Writing space

Session 17

MOU-S17-C16 | Grade 5 | Add and Subtract Fractions with Unlike Denominators

5.NF.A.1 | word problem

A walk is 1/2 mile. Sofia has walked 1/16 mile. How much remains?

Writing space

MOU-S17-C17 | Grade 5 | The Size of a Product

5.NF.B.5 | reasoning

Which products are less than 6? Select all that apply.

- ☐ **A.** 6 × 3/4
- ☐ **B.** 6 × 1
- ☐ **C.** 6 × 2/3

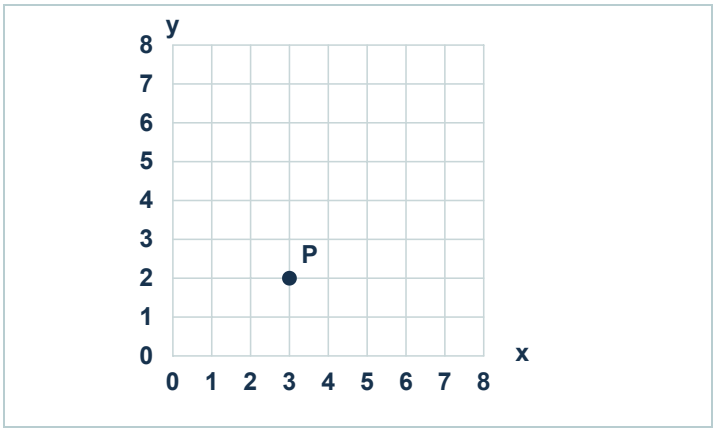
Writing space

Session 17

MOU-S17-C18 | Grade 5 | The Coordinate Grid

5.G.A.2 | word problem

Point P moves 2 units right and 1 unit up. Give the new ordered pair.



Writing space

MOU-S17-C19 | Grade 4 | Decimals with Tenths and Hundredths

4.NF.C.6 | word problem

A number is 6 tenths plus 4 hundredths. Write it as a decimal.

Writing space

Session 17

MOU-S17-C20 | Grade 4 | Place Value Relationships through 1,000,000

4.NBT.A.1 | word problem

A number is 45000. What number has every digit shifted one place to the left, with a zero in the ones place?

Writing space

MOU-S17-C21 | Grade 4 | Compare, Order, and Round

4.NBT.A.3 | word problem

The numbers 20267, 21467, and 20067 label three towns. What is the difference between the greatest and least?

Writing space

MOU-S17-C22 | Grade 4 | Add and Subtract

4.NBT.B.4 | reasoning

Kai needs to find 26170 + 7274. Which method gives the same total? Choose one answer.

- ○ **A.** Add 26171 and 7273.
- ○ **B.** Add 26171 and 7275.
- ○ **C.** Subtract 7274 from 26171.

Writing space

Session 17

MOU-S17-F01 | Grade 4 | Fast facts: Addition
4.NBT.B.4 | fluency

___ + 1029 = 4208. Find the missing addend.

Writing space

MOU-S17-F02 | Grade 4 | Fast facts: Subtraction
4.NBT.B.4 | fluency

3886 - ___ = 3368. Find the missing amount.

Writing space

MOU-S17-F03 | Grade 5 | Fast facts: Multiplication
5.NBT.B.5 | fluency

Complete 178 x 25 = ___ using division to check.

Writing space

MOU-S17-F04 | Grade 5 | Fast facts: Division
5.NBT.B.6 | fluency

Find 3528 / 28 using multiplication to check.

Writing space

MOU-S17-F05 | Grade 5 | Fast facts: Addition
5.NBT.B.7 | fluency

___ + 0.4 = 1.7. Find the missing addend.

Writing space

MOU-S17-F06 | Grade 5 | Fast facts: Subtraction
5.NBT.B.7 | fluency

1.9 - ___ = 1.6. Find the missing amount.

Writing space

MOU-S17-F07 | Grade 5 | Fast facts: Multiplication
5.NBT.B.5 | fluency

Find 161 x 35 using a related fact.

Writing space

MOU-S17-F08 | Grade 5 | Fast facts: Division
5.NBT.B.6 | fluency

Find 1767 / 19.

Writing space

Session 18

MOU-S18-C01 | Grade 5 | The Hierarchy of Shapes

5.G.B.4 | reasoning

Which condition is enough to classify a quadrilateral as a rectangle? Choose one answer.

- ○ **A.** Four right angles
- ○ **B.** One pair of equal sides

Writing space

MOU-S18-C02 | Grade 5 | Numerical Patterns

5.OA.B.3 | word problem

Two patterns start at 0. Pattern A adds 2. Pattern B adds 4. At one step, A is 10. What is B at that step?

Writing space

MOU-S18-C03 | Grade 5 | Multiply and Divide Whole Numbers

5.NBT.B.6 | word problem

A school has 496 students. Each bus holds 15. What is the fewest number of buses needed?

Writing space

Session 18

MOU-S18-C04 | Grade 5 | Apply Volume Concepts

5.MD.C.5 | word problem

Design a box with volume 72 cubic units, length 6, and width 3. What height meets these requirements?

Writing space

MOU-S18-C05 | Grade 5 | Fraction and Decimal Operations

5.NBT.B.7 | word problem

A bottle holds 4.75 liters. 4.25 liters are used. Give the remaining amount as a fraction of a liter.

Writing space

MOU-S18-C06 | Grade 5 | Creation and Design

5.MD.C.5 | word problem

Design a box with volume 40 cubic units, length 2, and width 5. What height meets these requirements?

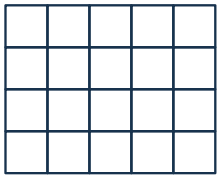
Writing space

Session 18

MOU-S18-C07 | Grade 5 | Unit Cubes and Volume

5.MD.C.4 | word problem

This drawing shows the bottom layer of a prism. There are 3 full layers. How many unit cubes fill the prism?



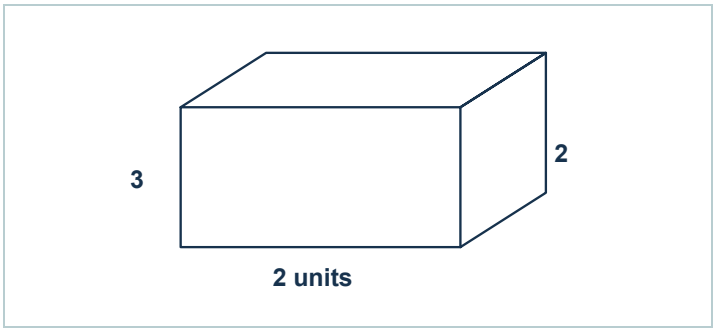
Writing space

Session 18

MOU-S18-C08 | Grade 5 | Expressions for Finding Volume

5.MD.C.5 | reasoning

Which expressions give the volume of this prism? Select all that apply.



- □ **A.** (2 × 2) × 3
- □ **B.** 2 + 2 + 3
- □ **C.** 2 × (2 × 3)

Writing space

MOU-S18-C09 | Grade 5 | Volumes of Solid Figures

5.MD.C.5 | word problem

A solid joins two prisms without overlap. Their dimensions are 5 by 2 by 3 and 2 by 2 by 2. Find the total volume.

Writing space

Session 18

MOU-S18-C10 | Grade 5 | Fractions as Quotients

5.NF.B.3 | word problem

3 identical sandwiches are shared equally by 6 children. What fraction of a sandwich does each child get?

Writing space

Session 18

MOU-S18-C11 | Grade 5 | Fractions of Whole Numbers

5.NF.B.4 | explanation

2/3 of 18 students choose art. How many students choose art? Explain your reasoning and check your result.

Writing space

Session 18

MOU-S18-C12 | Grade 5 | Area and Fractional Side Lengths

5.NF.B.4 | word problem

A rectangle is 3/4 meter long and 4/2 meters wide. What is its area in square meters?

Writing space

MOU-S18-C13 | Grade 5 | Fraction Multiplication

5.NF.B.4 | word problem

A rectangle is 4/5 meter long and 2/2 meters wide. What is its area in square meters?

Writing space

MOU-S18-C14 | Grade 5 | Fraction Division

5.NF.B.7 | word problem

5 meters of ribbon are cut into pieces of length 1/5 meter. How many pieces are made?

Writing space

MOU-S18-C15 | Grade 5 | Problem Solving with Fractions

5.NF.B.7 | word problem

A recipe uses 1/2 cup of oil. Zoe makes half a recipe. How many cups of oil are needed?

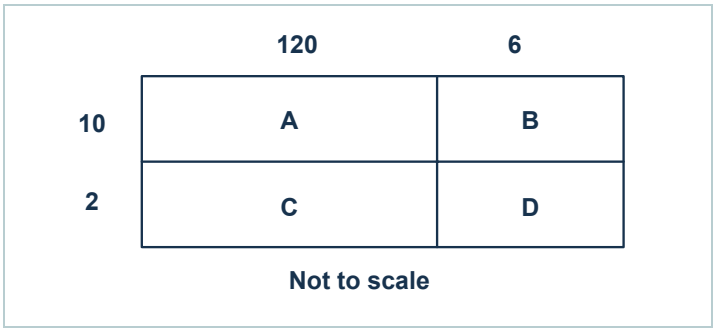
Writing space

Session 18

MOU-S18-C16 | Grade 5 | Multi-digit Multiplication Using the Standard Algorithm

5.NBT.B.5 | word problem

Use the area model to find the whole product.



Writing space

MOU-S18-C17 | Grade 5 | Multi-digit Division Using Partial Quotients

5.NBT.B.6 | word problem

312 tiles fill boxes of 13. How many boxes are filled? Use partial quotients.

Writing space

MOU-S18-C18 | Grade 5 | Let's Put It to Work

5.NBT.B.6 | word problem

32 boxes each contain 16 books. 32 books are donated. How many remain?

Writing space

Session 18

MOU-S18-C19 | Grade 4 | Multiplicative Comparison

4.OA.A.2 | word problem

Leo's ribbon is 10 cm long. Layla's is 5 cm long. How many times as long is the first ribbon?

Writing space

MOU-S18-C20 | Grade 4 | Measurement Conversion

4.MD.A.1 | word problem

A ribbon is 3 meters long. 30 centimeters are cut off. How many centimeters remain?

Writing space

MOU-S18-C21 | Grade 4 | Let’s Put It to Work

4.MD.A.3 | word problem

A rectangular display must have area 55 square meters and width 5 meters. What length meets these requirements?

Writing space

MOU-S18-C22 | Grade 4 | Features of Patterns

4.OA.C.5 | word problem

A pattern starts at 8 and adds 4. What is the term after 4 steps?

Writing space

Session 18

MOU-S18-F01 | Grade 4 | Fast facts: Addition
4.NBT.B.4 | fluency

3706 + ___ = 4562. Find the missing addend.

Writing space

MOU-S18-F02 | Grade 4 | Fast facts: Subtraction
4.NBT.B.4 | fluency

Find 4948 - 1049 using an inverse operation.

Writing space

MOU-S18-F03 | Grade 5 | Fast facts: Multiplication
5.NBT.B.5 | fluency

Find 138 x 18 using a related fact.

Writing space

MOU-S18-F04 | Grade 5 | Fast facts: Division
5.NBT.B.6 | fluency

31 is a factor of 3751. What other factor completes the pair?

Writing space

MOU-S18-F05 | Grade 5 | Fast facts: Addition
5.NBT.B.7 | fluency

1.0 + ___ = 1.2. Find the missing addend.

Writing space

MOU-S18-F06 | Grade 5 | Fast facts: Subtraction
5.NBT.B.7 | fluency

Find 1.4 - 0.1 using a related addition fact.

Writing space

MOU-S18-F07 | Grade 5 | Fast facts: Multiplication
5.NBT.B.5 | fluency

Find 214 x 28.

Writing space

MOU-S18-F08 | Grade 5 | Fast facts: Division
5.NBT.B.6 | fluency

___ / 21 = 88. Find the dividend.

Writing space

Session 19

MOU-S19-C01 | Grade 5 | Numbers to Thousandths

5.NBT.A.3 | word problem

A number is 5 tenths plus 3 thousandths. Write it as a decimal.

Writing space

MOU-S19-C02 | Grade 5 | Add and Subtract Decimals

5.NBT.B.7 | word problem

Two ropes are 3.37 meters and 0.48 meter long. What is their combined length?

Writing space

MOU-S19-C03 | Grade 5 | Multiply Decimals

5.NBT.B.7 | word problem

Fabric costs $6.40 per meter. What is the cost of 0.4 meter, in dollars?

Writing space

MOU-S19-C04 | Grade 5 | Divide Decimals

5.NBT.B.7 | word problem

How many 0.5-meter pieces fit in 2 meters of ribbon?

Writing space

Session 19

MOU-S19-C05 | Grade 5 | Measurement Conversions and Powers of 10 5.MD.A.1 | word problem

A ribbon is 2.2 meters long. 20 centimeters are cut off. How many centimeters remain?

Writing space

MOU-S19-C06 | Grade 5 | Add and Subtract Fractions with Unlike Denominators 5.NF.A.1 | word problem

Add 1/2 and 1/14. Give a fraction.

Writing space

MOU-S19-C07 | Grade 5 | The Size of a Product 5.NF.B.5 | reasoning

Without multiplying, compare 3 × 4/3 with 3. Choose one answer.

- ○ **A.** The product is greater.
- ○ **B.** The product is less.

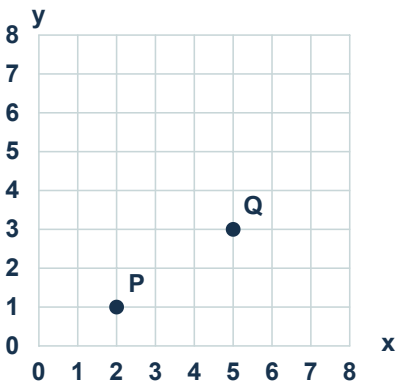
Writing space

Session 19

MOU-S19-C08 | Grade 5 | The Coordinate Grid

5.G.A.2 | word problem

Travel from P to Q using only right and up moves on grid lines. How many unit moves are needed?



Writing space

Session 19

MOU-S19-C09 | Grade 5 | The Hierarchy of Shapes

5.G.B.4 | reasoning

Which statements are always true? Select all that apply.

- ☐ **A.** Every square is a rectangle.
- ☐ **B.** Every rectangle is a square.
- ☐ **C.** Every square is a rhombus.

Writing space

MOU-S19-C10 | Grade 5 | Numerical Patterns

5.OA.B.3 | word problem

Two patterns start at 2. A adds 5 each step. B adds 7. How far apart are their values after 2 steps?

Writing space

Session 19

MOU-S19-C11 | Grade 5 | Multiply and Divide Whole Numbers

5.NBT.B.6 | explanation

35 boxes each contain 17 books. 85 books are donated. How many remain? Explain your reasoning and check your result.

Writing space

Session 19

MOU-S19-C12 | Grade 5 | Apply Volume Concepts 5.MD.C.5 | word problem

A box is 3 by 2 by 4 units. A designer doubles only its height. How many additional unit cubes will fit?

Writing space

MOU-S19-C13 | Grade 5 | Fraction and Decimal Operations 5.NBT.B.7 | word problem

Add 6/2 and 0.25. Give a decimal.

Writing space

MOU-S19-C14 | Grade 5 | Creation and Design 5.MD.C.5 | word problem

A box is 4 by 3 by 4 units. A designer doubles only its height. How many additional unit cubes will fit?

Writing space

MOU-S19-C15 | Grade 5 | Unit Cubes and Volume 5.MD.C.4 | word problem

A prism has 18 cubes in each layer and volume 54 cubic units. How many layers are there?

Writing space

Session 19

MOU-S19-C16 | Grade 5 | Expressions for Finding Volume 5.MD.C.5 | word problem

A prism has 16 cubes in each layer and volume 48 cubic units. How many layers are there?

Writing space

MOU-S19-C17 | Grade 5 | Volumes of Solid Figures 5.MD.C.5 | word problem

Two non-overlapping prisms make a solid of volume 50. One prism has dimensions 2 by 5 by 3. What is the other prism's volume?

Writing space

MOU-S19-C18 | Grade 5 | Fractions as Quotients 5.NF.B.3 | word problem

5 liters of juice are shared equally among 8 pitchers. How much goes in each pitcher? Give a fraction.

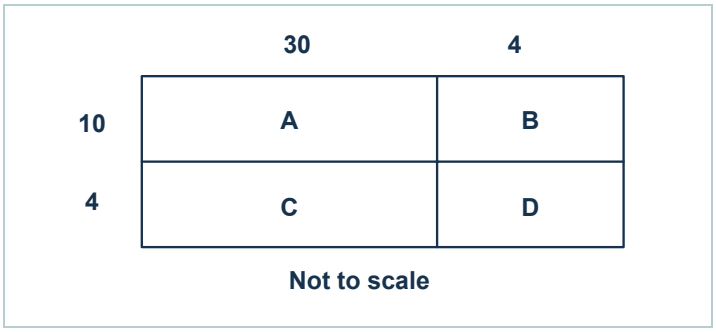
Writing space

Session 19

MOU-S19-C19 | Grade 4 | Multi-Digit Multiplication

4.NBT.B.5 | word problem

Use the area model to find the whole product.



Writing space

MOU-S19-C20 | Grade 4 | Multi-Digit Division

4.NBT.B.6 | word problem

110 tiles fill boxes of 5. How many boxes are filled? Use partial quotients.

Writing space

MOU-S19-C21 | Grade 4 | Let's Put It to Work: Problem Solving with Large Numbers

4.OA.A.3 | word problem

35 boxes each contain 5 books. 25 books are donated. How many remain?

Writing space

Session 19

MOU-S19-C22 | Grade 4 | Points, Lines, Segments, Rays, and Angles

4.G.A.1 | reasoning

Two straight roads meet at a right angle. How are their center lines related? Choose one answer.

- ○ **A.** They are perpendicular.
- ○ **B.** They are parallel.

Writing space

Session 19

MOU-S19-F01 | Grade 4 | Fast facts: Addition — 4.NBT.B.4 | fluency

Complete 2737 + 687 = ___ using an inverse operation.

Writing space

MOU-S19-F02 | Grade 4 | Fast facts: Subtraction — 4.NBT.B.4 | fluency

Find 3802 - 876 using a related addition fact.

Writing space

MOU-S19-F03 | Grade 5 | Fast facts: Multiplication — 5.NBT.B.5 | fluency

One factor of 5539 is 191. What is the other factor?

Writing space

MOU-S19-F04 | Grade 5 | Fast facts: Division — 5.NBT.B.6 | fluency

Find 3712 / 32 using a related multiplication fact.

Writing space

MOU-S19-F05 | Grade 5 | Fast facts: Addition — 5.NBT.B.7 | fluency

Find 1.5 + 0.5 using a fact or place-value pattern.

Writing space

MOU-S19-F06 | Grade 5 | Fast facts: Subtraction — 5.NBT.B.7 | fluency

Find 1.4 - 0.4.

Writing space

MOU-S19-F07 | Grade 5 | Fast facts: Multiplication — 5.NBT.B.5 | fluency

___ x 21 = 3654. Find the missing factor.

Writing space

MOU-S19-F08 | Grade 5 | Fast facts: Division — 5.NBT.B.6 | fluency

1909 / ___ = 83. Find the divisor.

Writing space

Session 20

MOU-S20-C01 | Grade 5 | Fractions of Whole Numbers

5.NF.B.4 | word problem

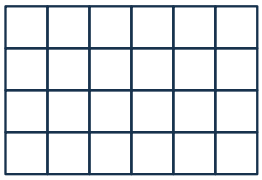
Layla says 4/5 of 15 is 14. Find the correct value.

Writing space

MOU-S20-C02 | Grade 5 | Area and Fractional Side Lengths

5.NF.B.4 | word problem

A rectangle is tiled with squares that each have area 1/25 square meter. There are 4 rows of 6 tiles. Find the area of the rectangle.



Writing space

MOU-S20-C03 | Grade 5 | Fraction Multiplication

5.NF.B.4 | word problem

A strip has 1/2 shaded. 3/4 of that shaded part is crosshatched. What fraction of the original whole is crosshatched?

Writing space

Session 20

MOU-S20-C04 | Grade 5 | Fraction Division

5.NF.B.7 | word problem

1/3 liter is shared equally among 2 cups. How much goes in each cup? Give a fraction.

Writing space

MOU-S20-C05 | Grade 5 | Problem Solving with Fractions

5.NF.B.7 | word problem

Amir has 5 liters of soup. After using 1 liter, the rest fills 1/3-liter bowls. How many bowls are filled?

Writing space

MOU-S20-C06 | Grade 5 | Multi-digit Multiplication Using the Standard Algorithm

5.NBT.B.5 | word problem

In the standard algorithm for 123 × 14, what is the partial product from the tens digit of 14?

Writing space

MOU-S20-C07 | Grade 5 | Multi-digit Division Using Partial Quotients

5.NBT.B.6 | word problem

To divide 364 by 14, Noor subtracts 280. What partial quotient is still needed?

Writing space

Session 20

MOU-S20-C08 | Grade 5 | Let's Put It to Work

5.NBT.B.6 | word problem

A school has 579 students. Each bus holds 17. What is the fewest number of buses needed?

Writing space

MOU-S20-C09 | Grade 5 | Numbers to Thousandths

5.NBT.A.3 | word problem

How many thousandths are in 0.2?

Writing space

MOU-S20-C10 | Grade 5 | Add and Subtract Decimals

5.NBT.B.7 | word problem

A jug contains 5.37 liters. Some is poured out, leaving 5.09 liters. How much was poured out?

Writing space

Session 20

MOU-S20-C11 | Grade 5 | Multiply Decimals

5.NBT.B.7 | explanation

A calculator shows 36 for 12 × 3. What is 1.2 × 0.3? Explain your reasoning and check your result.

Writing space

Session 20

MOU-S20-C12 | Grade 5 | Divide Decimals

5.NBT.B.7 | word problem

1.8 liters fill 6 equal bottles. How many liters are in each bottle?

Writing space

MOU-S20-C13 | Grade 5 | Measurement Conversions and Powers of 10

5.MD.A.1 | word problem

A ribbon is 4400 millimeters long. What is its length in meters?

Writing space

MOU-S20-C14 | Grade 5 | Add and Subtract Fractions with Unlike Denominators

5.NF.A.1 | word problem

A walk is 1/2 mile. Leo has walked 1/14 mile. How much remains?

Writing space

Session 20

MOU-S20-C15 | Grade 5 | The Size of a Product

5.NF.B.5 | reasoning

Which products are less than 5? Select all that apply.

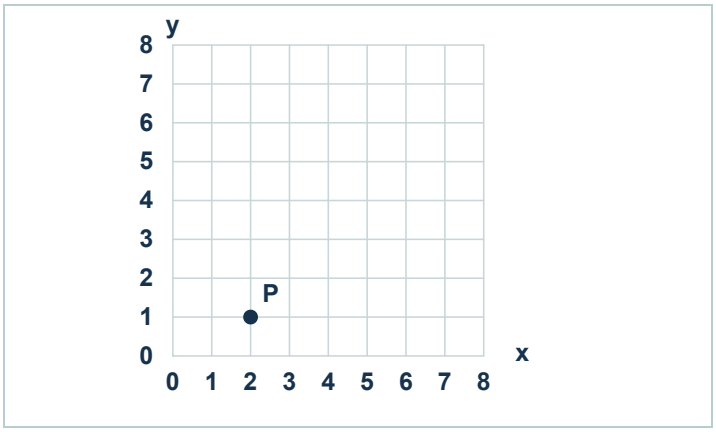
- ☐ **A.** 5 × 3/4
- ☐ **B.** 5 × 1
- ☐ **C.** 5 × 2/3

Writing space

Session 20

MOU-S20-C16 | Grade 5 | The Coordinate Grid 5.G.A.2 | word problem

Point P moves 2 units right and 1 unit up. Give the new ordered pair.



Writing space

Session 20

MOU-S20-C17 | Grade 5 | The Hierarchy of Shapes

5.G.B.4 | reasoning

A quadrilateral has four equal sides but no right angles. Which name must fit? Choose one answer.

- ○ **A.** Rhombus
- ○ **B.** Rectangle

Writing space

MOU-S20-C18 | Grade 5 | Numerical Patterns

5.OA.B.3 | word problem

Two patterns start at 0. Pattern A adds 3. Pattern B adds 6. At one step, A is 12. What is B at that step?

Writing space

MOU-S20-C19 | Grade 4 | The Size of an Angle

4.MD.C.5 | reasoning

An angle measures 60 degrees. One ray is drawn longer without changing its direction. What is the new measure? Choose one answer.

- ○ **A.** 60 degrees
- ○ **B.** 70 degrees

Writing space

Session 20

MOU-S20-C20 | Grade 4 | Angle Analysis

4.MD.C.7 | word problem

Two adjacent angles make a right angle. One measures 50 degrees. Find the other.

Writing space

MOU-S20-C21 | Grade 4 | Side Lengths, Angles, and Lines of Symmetry

4.G.A.3 | reasoning

Which attributes must every square have? Select all that apply.

- ☐ **A.** Four right angles
- ☐ **B.** Four equal sides
- ☐ **C.** Exactly one line of symmetry

Writing space

MOU-S20-C22 | Grade 4 | Reason about Attributes to Solve Problems

4.G.A.2 | reasoning

Which statements are always true? Select all that apply.

- ☐ **A.** Every square is a rectangle.
- ☐ **B.** Every rectangle is a square.
- ☐ **C.** Every square is a rhombus.

Writing space

Session 20

MOU-S20-F01 | Grade 4 | Fast facts: Addition
4.NBT.B.4 | fluency

Find 3268 + 518 using a fact or place-value pattern.

Writing space

MOU-S20-F02 | Grade 4 | Fast facts: Subtraction
4.NBT.B.4 | fluency

___ - 707 = 3457. Find the starting number.

Writing space

MOU-S20-F03 | Grade 5 | Fast facts: Multiplication
5.NBT.B.5 | fluency

Find 151 x 22 by breaking apart a factor.

Writing space

MOU-S20-F04 | Grade 5 | Fast facts: Division
5.NBT.B.6 | fluency

Find 3774 / 34 using multiplication to check.

Writing space

MOU-S20-F05 | Grade 5 | Fast facts: Addition
5.NBT.B.7 | fluency

Find 1.2 + 0.3.

Writing space

MOU-S20-F06 | Grade 5 | Fast facts: Subtraction
5.NBT.B.7 | fluency

___ - 0.2 = 1.5. Find the starting number.

Writing space

MOU-S20-F07 | Grade 5 | Fast facts: Multiplication
5.NBT.B.5 | fluency

134 x ___ = 4288. Find the missing factor.

Writing space

MOU-S20-F08 | Grade 5 | Fast facts: Division
5.NBT.B.6 | fluency

Find 3125 / 25 using multiplication to check.

Writing space

Session 21

MOU-S21-C01 | Grade 5 | Multiply and Divide Whole Numbers

5.NBT.B.6 | word problem

A school has 481 students. Each bus holds 15. What is the fewest number of buses needed?

Writing space

MOU-S21-C02 | Grade 5 | Apply Volume Concepts

5.MD.C.5 | word problem

Design a box with volume 60 cubic units, length 5, and width 3. What height meets these requirements?

Writing space

MOU-S21-C03 | Grade 5 | Fraction and Decimal Operations

5.NBT.B.7 | word problem

A bottle holds 3.75 liters. 3.25 liters are used. Give the remaining amount as a fraction of a liter.

Writing space

MOU-S21-C04 | Grade 5 | Creation and Design

5.MD.C.5 | word problem

Design a box with volume 96 cubic units, length 6, and width 4. What height meets these requirements?

Writing space

Session 21

MOU-S21-C05 | Grade 5 | Unit Cubes and Volume

5.MD.C.4 | word problem

This drawing shows the bottom layer of a prism. There are 3 full layers. How many unit cubes fill the prism?



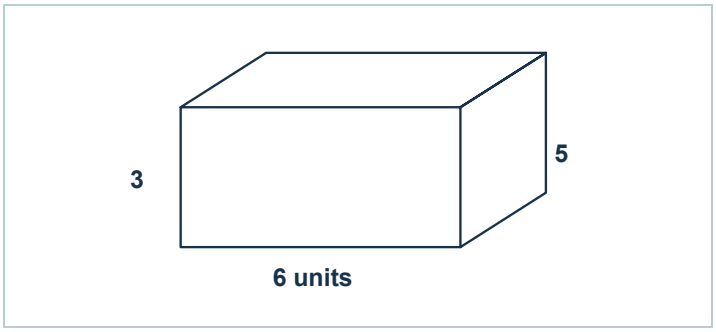
Writing space

Session 21

MOU-S21-C06 | Grade 5 | Expressions for Finding Volume

5.MD.C.5 | reasoning

Which expressions give the volume of this prism? Select all that apply.



- □ **A.** (6 × 5) × 3
- □ **B.** 6 + 5 + 3
- □ **C.** 6 × (5 × 3)

Writing space

MOU-S21-C07 | Grade 5 | Volumes of Solid Figures

5.MD.C.5 | word problem

A solid joins two prisms without overlap. Their dimensions are 4 by 2 by 3 and 2 by 2 by 2. Find the total volume.

Writing space

Session 21

MOU-S21-C08 | Grade 5 | Fractions as Quotients

5.NF.B.3 | word problem

2 identical sandwiches are shared equally by 6 children. What fraction of a sandwich does each child get?

Writing space

MOU-S21-C09 | Grade 5 | Fractions of Whole Numbers

5.NF.B.4 | word problem

2/3 of 15 students choose art. How many students choose art?

Writing space

MOU-S21-C10 | Grade 5 | Area and Fractional Side Lengths

5.NF.B.4 | word problem

A rectangle is 3/4 meter long and 3/2 meters wide. What is its area in square meters?

Writing space

Session 21

MOU-S21-C11 | Grade 5 | Fraction Multiplication

5.NF.B.4 | explanation

A rectangle is 3/4 meter long and 6/2 meters wide. What is its area in square meters? Explain your reasoning and check your result.

Writing space

Session 21

MOU-S21-C12 | Grade 5 | Fraction Division 5.NF.B.7 | word problem

4 meters of ribbon are cut into pieces of length 1/5 meter. How many pieces are made?

Writing space

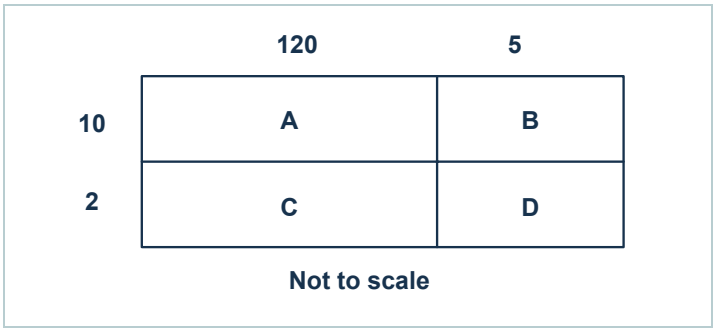
MOU-S21-C13 | Grade 5 | Problem Solving with Fractions 5.NF.B.7 | word problem

A recipe uses 1/2 cup of oil. Amir makes half a recipe. How many cups of oil are needed?

Writing space

MOU-S21-C14 | Grade 5 | Multi-digit Multiplication Using the Standard Algorithm 5.NBT.B.5 | word problem

Use the area model to find the whole product.



Writing space

Session 21

MOU-S21-C15 | Grade 5 | Multi-digit Division Using Partial Quotients 5.NBT.B.6 | word problem

299 tiles fill boxes of 13. How many boxes are filled? Use partial quotients.

Writing space

MOU-S21-C16 | Grade 5 | Let's Put It to Work 5.NBT.B.6 | word problem

36 boxes each contain 15 books. 90 books are donated. How many remain?

Writing space

MOU-S21-C17 | Grade 5 | Numbers to Thousandths 5.NBT.A.3 | word problem

A number is 4 tenths plus 4 thousandths. Write it as a decimal.

Writing space

MOU-S21-C18 | Grade 5 | Add and Subtract Decimals 5.NBT.B.7 | word problem

Two ropes are 2.37 meters and 0.58 meter long. What is their combined length?

Writing space

Session 21

MOU-S21-C19 | Grade 4 | Reason with Fractions 4.NF.A.2 | reasoning

Ribbon A is 7/8 meter long. Ribbon B is 1/2 meter long. Which ribbon is longer? Choose one answer.

- **A.** Ribbon A
- **B.** Ribbon B

Writing space

MOU-S21-C20 | Grade 4 | Whole-Number Operations 4.NBT.B.4 | reasoning

Zoe needs to find 26170 + 7548. Which method gives the same total? Choose one answer.

- **A.** Add 26171 and 7547.
- **B.** Add 26171 and 7549.
- **C.** Subtract 7548 from 26171.

Writing space

MOU-S21-C21 | Grade 4 | Solve Problems with Multiplication and Division 4.OA.A.3 | word problem

33 boxes each contain 5 books. 15 books are donated. How many remain?

Writing space

Session 21

MOU-S21-C22 | Grade 4 | Creation and Design

4.MD.A.3 | word problem

A rectangular display must have area 77 square meters and width 7 meters. What length meets these requirements?

Writing space

Session 21

MOU-S21-F01 | Grade 4 | Fast facts: Addition 4.NBT.B.4 | fluency

___ + 1049 = 4848. Find the missing addend.

Writing space

MOU-S21-F02 | Grade 4 | Fast facts: Subtraction 4.NBT.B.4 | fluency

3026 - ___ = 2488. Find the missing amount.

Writing space

MOU-S21-F03 | Grade 5 | Fast facts: Multiplication 5.NBT.B.5 | fluency

Find 204 x 33 using a related fact.

Writing space

MOU-S21-F04 | Grade 5 | Fast facts: Division 5.NBT.B.6 | fluency

Find 1995 / 19.

Writing space

MOU-S21-F05 | Grade 5 | Fast facts: Addition 5.NBT.B.7 | fluency

___ + 0.1 = 1.8. Find the missing addend.

Writing space

MOU-S21-F06 | Grade 5 | Fast facts: Subtraction 5.NBT.B.7 | fluency

1.7 - ___ = 1.2. Find the missing amount.

Writing space

MOU-S21-F07 | Grade 5 | Fast facts: Multiplication 5.NBT.B.5 | fluency

Complete 187 x 25 = ___ using division to check.

Writing space

MOU-S21-F08 | Grade 5 | Fast facts: Division 5.NBT.B.6 | fluency

Find 3267 / 27 using multiplication to check.

Writing space

Session 22

MOU-S22-C01 | Grade 5 | Multiply Decimals

5.NBT.B.7 | word problem

Fabric costs $5.40 per meter. What is the cost of 0.4 meter, in dollars?

Writing space

MOU-S22-C02 | Grade 5 | Divide Decimals

5.NBT.B.7 | word problem

How many 0.5-meter pieces fit in 1.5 meters of ribbon?

Writing space

MOU-S22-C03 | Grade 5 | Measurement Conversions and Powers of 10

5.MD.A.1 | word problem

A ribbon is 6.5 meters long. 50 centimeters are cut off. How many centimeters remain?

Writing space

MOU-S22-C04 | Grade 5 | Add and Subtract Fractions with Unlike Denominators

5.NF.A.1 | word problem

Add 1/2 and 1/12. Give a fraction.

Writing space

Session 22

MOU-S22-C05 | Grade 5 | The Size of a Product

5.NF.B.5 | reasoning

Without multiplying, compare 2 × 4/3 with 2. Choose one answer.

- ○ **A.** The product is greater.
- ○ **B.** The product is less.

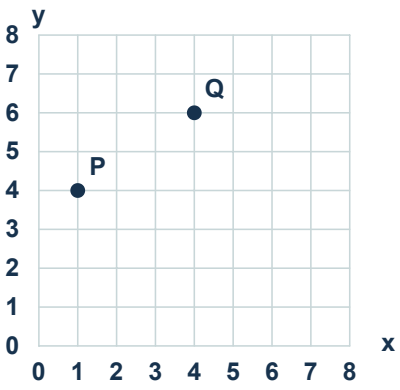
Writing space

Session 22

MOU-S22-C06 | Grade 5 | The Coordinate Grid

5.G.A.2 | word problem

Travel from P to Q using only right and up moves on grid lines. How many unit moves are needed?



Writing space

Session 22

MOU-S22-C07 | Grade 5 | The Hierarchy of Shapes

5.G.B.4 | reasoning

A shape belongs to both the rectangle group and the rhombus group. What must it be? Choose one answer.

- ○ **A.** A square
- ○ **B.** A triangle

Writing space

MOU-S22-C08 | Grade 5 | Numerical Patterns

5.OA.B.3 | word problem

Two patterns start at 6. A adds 4 each step. B adds 6. How far apart are their values after 6 steps?

Writing space

MOU-S22-C09 | Grade 5 | Multiply and Divide Whole Numbers

5.NBT.B.6 | word problem

34 boxes each contain 17 books. 68 books are donated. How many remain?

Writing space

Session 22

MOU-S22-C10 | Grade 5 | Apply Volume Concepts

5.MD.C.5 | word problem

A box is 2 by 2 by 4 units. A designer doubles only its height. How many additional unit cubes will fit?

Writing space

Session 22

MOU-S22-C11 | Grade 5 | Fraction and Decimal Operations

5.NBT.B.7 | explanation

Add 5/2 and 0.25. Give a decimal. Explain your reasoning and check your result.

Writing space

Session 22

MOU-S22-C12 | Grade 5 | Creation and Design

5.MD.C.5 | word problem

A box is 3 by 3 by 4 units. A designer doubles only its height. How many additional unit cubes will fit?

Writing space

MOU-S22-C13 | Grade 5 | Unit Cubes and Volume

5.MD.C.4 | word problem

A prism has 15 cubes in each layer and volume 45 cubic units. How many layers are there?

Writing space

MOU-S22-C14 | Grade 5 | Expressions for Finding Volume

5.MD.C.5 | word problem

A prism has 12 cubes in each layer and volume 36 cubic units. How many layers are there?

Writing space

MOU-S22-C15 | Grade 5 | Volumes of Solid Figures

5.MD.C.5 | word problem

Two non-overlapping prisms make a solid of volume 88. One prism has dimensions 6 by 4 by 3. What is the other prism's volume?

Writing space

Session 22

MOU-S22-C16 | Grade 5 | Fractions as Quotients

5.NF.B.3 | word problem

4 liters of juice are shared equally among 8 pitchers. How much goes in each pitcher? Give a fraction.

Writing space

MOU-S22-C17 | Grade 5 | Fractions of Whole Numbers

5.NF.B.4 | word problem

Layla says 1/2 of 4 is 3. Find the correct value.

Writing space

MOU-S22-C18 | Grade 5 | Area and Fractional Side Lengths

5.NF.B.4 | word problem

A rectangle is tiled with squares that each have area 1/4 square meter. There are 1 rows of 5 tiles. Find the area of the rectangle.



Writing space

Session 22

MOU-S22-C19 | Grade 4 | Understand Factors and Multiples

4.OA.B.4 | reasoning

Which numbers are factors of 30? Select all that apply.

- ☐ A. 2
- ☐ B. 3
- ☐ C. 29

Writing space

MOU-S22-C20 | Grade 4 | Find Factor Pairs and Multiples

4.OA.B.4 | reasoning

Which numbers are factors of 18? Select all that apply.

- ☐ A. 2
- ☐ B. 3
- ☐ C. 17

Writing space

MOU-S22-C21 | Grade 4 | Size and Location of Fractions

4.NF.A.1 | word problem

A number line has 2 equal intervals from 0 to 1. A point is 3 intervals from 0. Give its value as a fraction.

Writing space

Session 22

MOU-S22-C22 | Grade 4 | Equivalent Fractions

4.NF.A.1 | word problem

Complete the equivalent fractions: 2/3 = ?/12. Give the missing numerator.

Writing space

Session 22

MOU-S22-F01 | Grade 4 | Fast facts: Addition
4.NBT.B.4 | fluency

2826 + ___ = 3702. Find the missing addend.

Writing space

MOU-S22-F02 | Grade 4 | Fast facts: Subtraction
4.NBT.B.4 | fluency

Find 3388 - 369 using a related addition fact.

Writing space

MOU-S22-F03 | Grade 5 | Fast facts: Multiplication
5.NBT.B.5 | fluency

Find 164 x 26.

Writing space

MOU-S22-F04 | Grade 5 | Fast facts: Division
5.NBT.B.6 | fluency

___ / 21 = 101. Find the dividend.

Writing space

MOU-S22-F05 | Grade 5 | Fast facts: Addition
5.NBT.B.7 | fluency

1.4 + ___ = 1.8. Find the missing addend.

Writing space

MOU-S22-F06 | Grade 5 | Fast facts: Subtraction
5.NBT.B.7 | fluency

Find 2.0 - 0.3 using an inverse operation.

Writing space

MOU-S22-F07 | Grade 5 | Fast facts: Multiplication
5.NBT.B.5 | fluency

Find 147 x 18 using a related fact.

Writing space

MOU-S22-F08 | Grade 5 | Fast facts: Division
5.NBT.B.6 | fluency

29 is a factor of 3335. What other factor completes the pair?

Writing space

Session 23

MOU-S23-C01 | Grade 5 | Fraction Multiplication

5.NF.B.4 | word problem

A strip has 1/2 shaded. 2/3 of that shaded part is crosshatched. What fraction of the original whole is crosshatched?

Writing space

MOU-S23-C02 | Grade 5 | Fraction Division

5.NF.B.7 | word problem

1/2 liter is shared equally among 6 cups. How much goes in each cup? Give a fraction.

Writing space

MOU-S23-C03 | Grade 5 | Problem Solving with Fractions

5.NF.B.7 | word problem

Jude has 4 liters of soup. After using 1 liter, the rest fills 1/3-liter bowls. How many bowls are filled?

Writing space

MOU-S23-C04 | Grade 5 | Multi-digit Multiplication Using the Standard Algorithm

5.NBT.B.5 | word problem

In the standard algorithm for 122 × 14, what is the partial product from the tens digit of 14?

Writing space

Session 23

MOU-S23-C05 | Grade 5 | Multi-digit Division Using Partial Quotients

5.NBT.B.6 | word problem

To divide 350 by 14, Zoe subtracts 280. What partial quotient is still needed?

Writing space

MOU-S23-C06 | Grade 5 | Let's Put It to Work

5.NBT.B.6 | word problem

A school has 562 students. Each bus holds 17. What is the fewest number of buses needed?

Writing space

MOU-S23-C07 | Grade 5 | Numbers to Thousandths

5.NBT.A.3 | word problem

How many thousandths are in 0.6?

Writing space

MOU-S23-C08 | Grade 5 | Add and Subtract Decimals

5.NBT.B.7 | word problem

A jug contains 4.37 liters. Some is poured out, leaving 4.09 liters. How much was poured out?

Writing space

Session 23

MOU-S23-C09 | Grade 5 | Multiply Decimals

5.NBT.B.7 | word problem

A calculator shows 24 for 8 × 3. What is 0.8 × 0.3?

Writing space

MOU-S23-C10 | Grade 5 | Divide Decimals

5.NBT.B.7 | word problem

1.5 liters fill 5 equal bottles. How many liters are in each bottle?

Writing space

Session 23

MOU-S23-C11 | Grade 5 | Measurement Conversions and Powers of 10

5.MD.A.1 | explanation

A ribbon is 3400 millimeters long. What is its length in meters? Explain your reasoning and check your result.

Writing space

Session 23

MOU-S23-C12 | Grade 5 | Add and Subtract Fractions with Unlike Denominators

5.NF.A.1 | word problem

A walk is 1/2 mile. Noor has walked 1/20 mile. How much remains?

Writing space

MOU-S23-C13 | Grade 5 | The Size of a Product

5.NF.B.5 | reasoning

Which products are less than 4? Select all that apply.

- ☐ **A.** 4 × 3/4
- ☐ **B.** 4 × 1
- ☐ **C.** 4 × 2/3

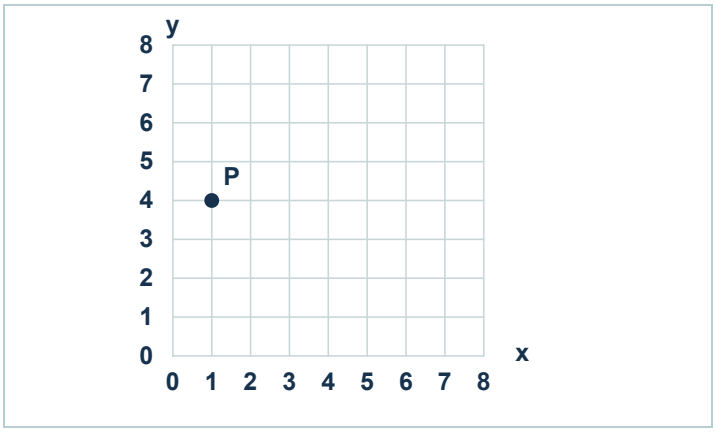
Writing space

Session 23

MOU-S23-C14 | Grade 5 | The Coordinate Grid

5.G.A.2 | word problem

Point P moves 2 units right and 1 unit up. Give the new ordered pair.



Writing space

Session 23

MOU-S23-C15 | Grade 5 | The Hierarchy of Shapes 5.G.B.4 | reasoning

Which groups must contain every rectangle? Select all that apply.

- □ **A.** Quadrilaterals
- □ **B.** Parallelograms
- □ **C.** Rhombuses

Writing space

MOU-S23-C16 | Grade 5 | Numerical Patterns 5.OA.B.3 | word problem

Two patterns start at 0. Pattern A adds 3. Pattern B adds 6. At one step, A is 9. What is B at that step?

Writing space

MOU-S23-C17 | Grade 5 | Multiply and Divide Whole Numbers 5.NBT.B.6 | word problem

A school has 541 students. Each bus holds 15. What is the fewest number of buses needed?

Writing space

Session 23

MOU-S23-C18 | Grade 5 | Apply Volume Concepts 5.MD.C.5 | word problem

Design a box with volume 64 cubic units, length 4, and width 4. What height meets these requirements?

Writing space

MOU-S23-C19 | Grade 4 | Fraction Comparison 4.NF.A.2 | reasoning

Which fraction is greater: 2/3 or 2/5? Choose one answer.

- ○ **A.** 2/5
- ○ **B.** 2/3

Writing space

MOU-S23-C20 | Grade 4 | Equal Groups of Fractions 4.NF.B.4 | word problem

2 servings use 1/2 cup of oats altogether. Each serving uses the same amount. How much does one serving use?

Writing space

Session 23

MOU-S23-C21 | Grade 4 | Addition and Subtraction of Fractions

4.NF.B.3 | word problem

Omar has 6/4 meters of string and uses 3/4 meter. How much remains?

Writing space

MOU-S23-C22 | Grade 4 | Addition of Tenths and Hundredths

4.NF.C.5 | word problem

Complete: 3/10 + ?/100 = 35/100. Give the missing numerator.

Writing space

Session 23

MOU-S23-F01 | Grade 4 | Fast facts: Addition — 4.NBT.B.4 | fluency

Find 3357 + 707 using a fact or place-value pattern.

Writing space

MOU-S23-F02 | Grade 4 | Fast facts: Subtraction — 4.NBT.B.4 | fluency

Find 4442 - 896.

Writing space

MOU-S23-F03 | Grade 5 | Fast facts: Multiplication — 5.NBT.B.5 | fluency

___ x 19 = 2356. Find the missing factor.

Writing space

MOU-S23-F04 | Grade 5 | Fast facts: Division — 5.NBT.B.6 | fluency

2185 / ___ = 95. Find the divisor.

Writing space

MOU-S23-F05 | Grade 5 | Fast facts: Addition — 5.NBT.B.7 | fluency

Complete 1.1 + 0.2 = ___ using an inverse operation.

Writing space

MOU-S23-F06 | Grade 5 | Fast facts: Subtraction — 5.NBT.B.7 | fluency

Find 1.5 - 0.1 using a related addition fact.

Writing space

MOU-S23-F07 | Grade 5 | Fast facts: Multiplication — 5.NBT.B.5 | fluency

One factor of 5829 is 201. What is the other factor?

Writing space

MOU-S23-F08 | Grade 5 | Fast facts: Division — 5.NBT.B.6 | fluency

Find 3441 / 31 using a related multiplication fact.

Writing space

Session 24

MOU-S24-C01 | Grade 5 | Fraction and Decimal Operations

5.NBT.B.7 | word problem

A bottle holds 2.75 liters. 2.25 liters are used. Give the remaining amount as a fraction of a liter.

Writing space

MOU-S24-C02 | Grade 5 | Creation and Design

5.MD.C.5 | word problem

Design a box with volume 80 cubic units, length 5, and width 4. What height meets these requirements?

Writing space

MOU-S24-C03 | Grade 5 | Unit Cubes and Volume

5.MD.C.4 | word problem

This drawing shows the bottom layer of a prism. There are 3 full layers. How many unit cubes fill the prism?



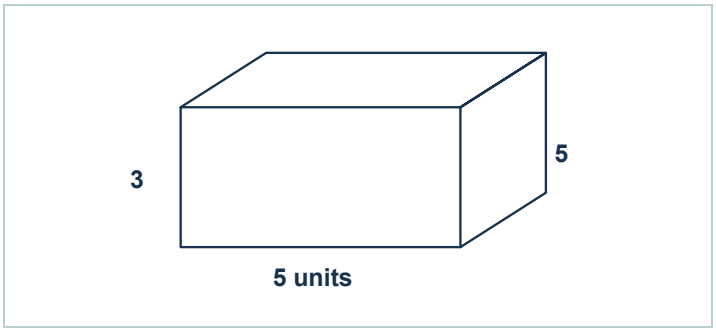
Writing space

Session 24

MOU-S24-C04 | Grade 5 | Expressions for Finding Volume

5.MD.C.5 | reasoning

Which expressions give the volume of this prism? Select all that apply.



- □ **A.** (5 × 5) × 3
- □ **B.** 5 + 5 + 3
- □ **C.** 5 × (5 × 3)

Writing space

MOU-S24-C05 | Grade 5 | Volumes of Solid Figures

5.MD.C.5 | word problem

A solid joins two prisms without overlap. Their dimensions are 3 by 2 by 3 and 2 by 2 by 2. Find the total volume.

Writing space

Session 24

MOU-S24-C06 | Grade 5 | Fractions as Quotients

5.NF.B.3 | word problem

6 identical sandwiches are shared equally by 5 children. What fraction of a sandwich does each child get?

Writing space

MOU-S24-C07 | Grade 5 | Fractions of Whole Numbers

5.NF.B.4 | word problem

2/3 of 12 students choose art. How many students choose art?

Writing space

MOU-S24-C08 | Grade 5 | Area and Fractional Side Lengths

5.NF.B.4 | word problem

A rectangle is 3/4 meter long and 2/2 meters wide. What is its area in square meters?

Writing space

MOU-S24-C09 | Grade 5 | Fraction Multiplication

5.NF.B.4 | word problem

A rectangle is 3/4 meter long and 5/2 meters wide. What is its area in square meters?

Writing space

Session 24

MOU-S24-C10 | Grade 5 | Fraction Division

5.NF.B.7 | word problem

3 meters of ribbon are cut into pieces of length 1/5 meter. How many pieces are made?

Writing space

Session 24

MOU-S24-C11 | Grade 5 | Problem Solving with Fractions

5.NF.B.7 | explanation

A recipe uses 1/5 cup of oil. Jude makes half a recipe. How many cups of oil are needed? Explain your reasoning and check your result.

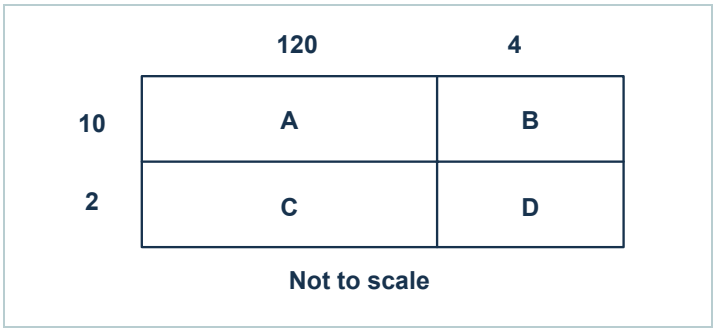
Writing space

Session 24

MOU-S24-C12 | Grade 5 | Multi-digit Multiplication Using the Standard Algorithm

5.NBT.B.5 | word problem

Use the area model to find the whole product.



Writing space

MOU-S24-C13 | Grade 5 | Multi-digit Division Using Partial Quotients

5.NBT.B.6 | word problem

286 tiles fill boxes of 13. How many boxes are filled? Use partial quotients.

Writing space

MOU-S24-C14 | Grade 5 | Let's Put It to Work

5.NBT.B.6 | word problem

35 boxes each contain 15 books. 75 books are donated. How many remain?

Writing space

Session 24

MOU-S24-C15 | Grade 5 | Numbers to Thousandths

5.NBT.A.3 | word problem

A number is 3 tenths plus 4 thousandths. Write it as a decimal.

Writing space

MOU-S24-C16 | Grade 5 | Add and Subtract Decimals

5.NBT.B.7 | word problem

Two ropes are 6.37 meters and 0.48 meter long. What is their combined length?

Writing space

MOU-S24-C17 | Grade 5 | Multiply Decimals

5.NBT.B.7 | word problem

Fabric costs $4.40 per meter. What is the cost of 0.5 meter, in dollars?

Writing space

MOU-S24-C18 | Grade 5 | Divide Decimals

5.NBT.B.7 | word problem

How many 0.2-meter pieces fit in 0.4 meters of ribbon?

Writing space

Session 24

MOU-S24-C19 | Grade 4 | Decimals with Tenths and Hundredths

4.NF.C.6 | word problem

How many hundredths are in 0.3?

Writing space

MOU-S24-C20 | Grade 4 | Place Value Relationships through 1,000,000

4.NBT.A.1 | word problem

In 65000, move the digit 6 one place right. The original digit value is how many times the new value?

Writing space

MOU-S24-C21 | Grade 4 | Compare, Order, and Round

4.NBT.A.3 | word problem

A town reports 40267 people. Round to the nearest thousand.

Writing space

MOU-S24-C22 | Grade 4 | Add and Subtract

4.NBT.B.4 | word problem

Omar has 22468 museum tickets. A friend has 29879. How many fewer does Omar have?

Writing space

Session 24

MOU-S24-F01 | Grade 4 | Fast facts: Addition
4.NBT.B.4 | fluency

Find 3888 + 538.

Writing space

MOU-S24-F02 | Grade 4 | Fast facts: Subtraction
4.NBT.B.4 | fluency

___ - 727 = 2577. Find the starting number.

Writing space

MOU-S24-F03 | Grade 5 | Fast facts: Multiplication
5.NBT.B.5 | fluency

177 x ___ = 5487. Find the missing factor.

Writing space

MOU-S24-F04 | Grade 5 | Fast facts: Division
5.NBT.B.6 | fluency

Find 2275 / 25 using multiplication to check.

Writing space

MOU-S24-F05 | Grade 5 | Fast facts: Addition
5.NBT.B.7 | fluency

Find 1.6 + 0.5 using a fact or place-value pattern.

Writing space

MOU-S24-F06 | Grade 5 | Fast facts: Subtraction
5.NBT.B.7 | fluency

___ - 0.4 = 1.1. Find the starting number.

Writing space

MOU-S24-F07 | Grade 5 | Fast facts: Multiplication
5.NBT.B.5 | fluency

Find 161 x 22 by breaking apart a factor.

Writing space

MOU-S24-F08 | Grade 5 | Fast facts: Division
5.NBT.B.6 | fluency

Find 3465 / 33 using multiplication to check.

Writing space

Understand Factors and Multiples

Ask for a second method or a check.

MOU-R29 | Grade 4 | Understand Factors and Multiples

4.OA.B.4 | reasoning

Which numbers are factors of 18? Select all that apply.

- ☐ **A.** 2
- ☐ **B.** 3
- ☐ **C.** 17

Writing space

Find Factor Pairs and Multiples

Ask for a second method or a check.

MOU-R30 | Grade 4 | Find Factor Pairs and Multiples

4.OA.B.4 | word problem

30 chairs form equal rows with no chairs left over. There are 10 rows. How many chairs are in each row?

Writing space

Size and Location of Fractions

Ask for a second method or a check.

MOU-R31 | Grade 4 | Size and Location of Fractions

4.NF.A.1 | word problem

A number line has 2 equal intervals from 0 to 1. A point is 3 intervals from 0. Give its value as a fraction.

Writing space

Equivalent Fractions

Ask for a second method or a check.

MOU-R32 | Grade 4 | Equivalent Fractions 4.NF.A.1 | reasoning

Every part of a 2-part strip is split into 4 equal smaller parts. What happens to the shaded fraction? Choose one answer.

- ○ **A.** Its value stays the same.
- ○ **B.** Its value is multiplied by the number of new parts.

Writing space

Solve Problems with Multiplication and Division

Ask for a second method or a check.

MOU-R27 | Grade 4 | Solve Problems with Multiplication and Division

4.OA.A.3 | word problem

A school has 137 students. Each bus holds 4. What is the fewest number of buses needed?

Writing space

Creation and Design

Ask for a second method or a check.

MOU-R28 | Grade 4 | Creation and Design

4.MD.A.3 | word problem

A rectangular display must have area 66 square meters and width 6 meters. What length meets these requirements?

Writing space

Unit Cubes and Volume

Ask for a second method or a check.

MOU-R01 | Grade 5 | Unit Cubes and Volume

5.MD.C.4 | word problem

A prism has 4 cubes in each layer and volume 12 cubic units. How many layers are there?

Writing space

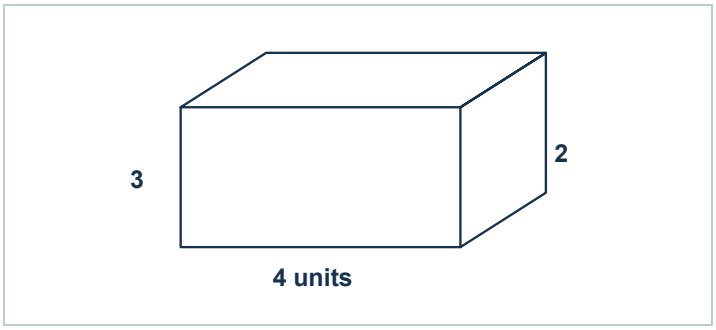
Expressions for Finding Volume

Ask for a second method or a check.

MOU-R02 | Grade 5 | Expressions for Finding Volume

5.MD.C.5 | reasoning

Which expressions give the volume of this prism? Select all that apply.



- ☐ **A.** (4 × 2) × 3
- ☐ **B.** 4 + 2 + 3
- ☐ **C.** 4 × (2 × 3)

Writing space

Volumes of Solid Figures

Ask for a second method or a check.

MOU-R03 | Grade 5 | Volumes of Solid Figures

5.MD.C.5 | word problem

Two non-overlapping prisms make a solid of volume 44. One prism has dimensions 6 by 2 by 3. What is the other prism's volume?

Writing space

Fractions as Quotients

Ask for a second method or a check.

MOU-R04 | Grade 5 | Fractions as Quotients 5.NF.B.3 | word problem

3 identical sandwiches are shared equally by 6 children. What fraction of a sandwich does each child get?

Writing space

Fractions of Whole Numbers

Ask for a second method or a check.

MOU-R05 | Grade 5 | Fractions of Whole Numbers

5.NF.B.4 | word problem

Layla says 2/3 of 15 is 14. Find the correct value.

Writing space

Area and Fractional Side Lengths

Ask for a second method or a check.

MOU-R06 | Grade 5 | Area and Fractional Side Lengths

5.NF.B.4 | word problem

A rectangle is 3/4 meter long and 2/2 meters wide. What is its area in square meters?

Writing space

Fraction Multiplication

Ask for a second method or a check.

MOU-R07 | Grade 5 | Fraction Multiplication

5.NF.B.4 | word problem

A strip has 3/4 shaded. 3/4 of that shaded part is crosshatched. What fraction of the original whole is crosshatched?

Writing space

Fraction Division

Ask for a second method or a check.

MOU-R08 | Grade 5 | Fraction Division 5.NF.B.7 | word problem

6 meters of ribbon are cut into pieces of length 1/4 meter. How many pieces are made?

Writing space

Problem Solving with Fractions

Ask for a second method or a check.

MOU-R09 | Grade 5 | Problem Solving with Fractions

5.NF.B.7 | word problem

Layla has 3 liters of soup. After using 1 liter, the rest fills 1/5-liter bowls. How many bowls are filled?

Writing space

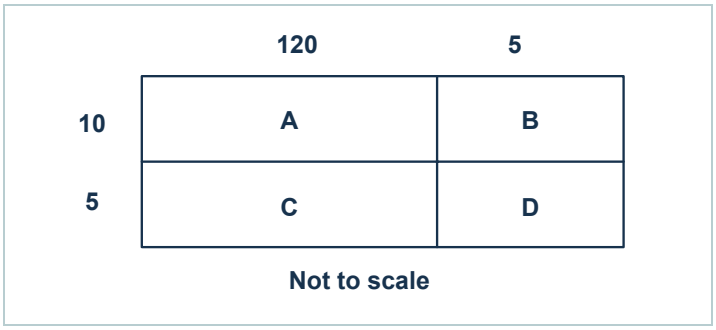
Multi-digit Multiplication Using the Standard Algorithm

Ask for a second method or a check.

MOU-R10 | Grade 5 | Multi-digit Multiplication Using the Standard Algorithm

5.NBT.B.5 | word problem

Use the area model to find the whole product.



Writing space

Multi-digit Division Using Partial Quotients

Ask for a second method or a check.

MOU-R11 | Grade 5 | Multi-digit Division Using Partial Quotients 5.NBT.B.6 | word problem

To divide 264 by 12, Layla subtracts 240. What partial quotient is still needed?

Writing space

Let’s Put It to Work

Ask for a second method or a check.

MOU-R12 | Grade 5 | Let’s Put It to Work

5.NBT.B.6 | word problem

34 boxes each contain 14 books. 56 books are donated. How many remain?

Writing space

Numbers to Thousandths

Ask for a second method or a check.

MOU-R13 | Grade 5 | Numbers to Thousandths

5.NBT.A.3 | word problem

How many thousandths are in 0.6?

Writing space

Add and Subtract Decimals

Ask for a second method or a check.

MOU-R14 | Grade 5 | Add and Subtract Decimals

5.NBT.B.7 | word problem

Two ropes are 3.37 meters and 0.38 meter long. What is their combined length?

Writing space

Multiply Decimals

Ask for a second method or a check.

MOU-R15 | Grade 5 | Multiply Decimals

5.NBT.B.7 | word problem

A calculator shows 60 for 20 × 3. What is 2 × 0.3?

Writing space

Divide Decimals

Ask for a second method or a check.

MOU-R16 | Grade 5 | Divide Decimals

5.NBT.B.7 | word problem

How many 0.4-meter pieces fit in 0.8 meters of ribbon?

Writing space

Measurement Conversions and Powers of 10

Ask for a second method or a check.

MOU-R17 | Grade 5 | Measurement Conversions and Powers of 10

5.MD.A.1 | word problem

A ribbon is 4400 millimeters long. What is its length in meters?

Writing space

Add and Subtract Fractions with Unlike Denominators

Ask for a second method or a check.

MOU-R18 | Grade 5 | Add and Subtract Fractions with Unlike Denominators

5.NF.A.1 | word problem

Add 1/2 and 1/20. Give a fraction.

Writing space

The Size of a Product

Ask for a second method or a check.

MOU-R19 | Grade 5 | The Size of a Product 5.NF.B.5 | reasoning

Which products are less than 3? Select all that apply.

- ☐ **A.** 3 × 3/4
- ☐ **B.** 3 × 1
- ☐ **C.** 3 × 2/3

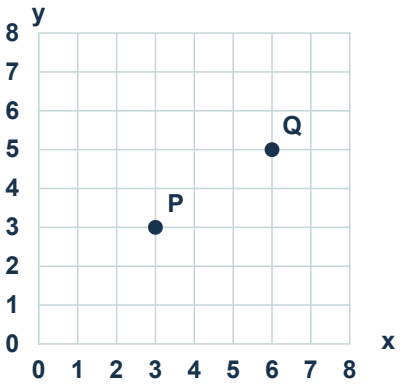
Writing space

The Coordinate Grid

Ask for a second method or a check.

MOU-R20 | Grade 5 | The Coordinate Grid 5.G.A.2 | word problem

Travel from P to Q using only right and up moves on grid lines. How many unit moves are needed?



Writing space

The Hierarchy of Shapes

Ask for a second method or a check.

MOU-R21 | Grade 5 | The Hierarchy of Shapes 5.G.B.4 | reasoning

Which property distinguishes a square from a rectangle that is not a square? Choose one answer.

- ○ **A.** All four sides are equal.
- ○ **B.** It has four right angles.

Writing space

Numerical Patterns

Ask for a second method or a check.

MOU-R22 | Grade 5 | Numerical Patterns 5.OA.B.3 | word problem

Two patterns start at 4. A adds 2 each step. B adds 4. How far apart are their values after 4 steps?

Writing space

Multiply and Divide Whole Numbers

Ask for a second method or a check.

MOU-R23 | Grade 5 | Multiply and Divide Whole Numbers 5.NBT.B.6 | word problem

A school has 505 students. Each bus holds 14. What is the fewest number of buses needed?

Writing space

Apply Volume Concepts

Ask for a second method or a check.

MOU-R24 | Grade 5 | Apply Volume Concepts

5.MD.C.5 | word problem

A box is 3 by 3 by 4 units. A designer doubles only its height. How many additional unit cubes will fit?

Writing space

Fraction and Decimal Operations

Ask for a second method or a check.

MOU-R25 | Grade 5 | Fraction and Decimal Operations 5.NBT.B.7 | word problem

A bottle holds 5.75 liters. 5.25 liters are used. Give the remaining amount as a fraction of a liter.

Writing space

Creation and Design

Ask for a second method or a check.

MOU-R26 | Grade 5 | Creation and Design

5.MD.C.5 | word problem

A box is 2 by 4 by 4 units. A designer doubles only its height. How many additional unit cubes will fit?

Writing space

Standards references

Source: https://www.thecorestandards.org/Math/

- **4.OA.B.4** Find Factor Pairs and Multiples
  https://www.thecorestandards.org/Math/Content/4/OA/B/4/
- **4.NF.A.1** Equivalent Fractions
  https://www.thecorestandards.org/Math/Content/4/NF/A/1/
- **4.NF.A.2** Reason with Fractions
  https://www.thecorestandards.org/Math/Content/4/NF/A/2/
- **4.NF.B.4** Equal Groups of Fractions
  https://www.thecorestandards.org/Math/Content/4/NF/B/4/
- **4.NF.B.3** Addition and Subtraction of Fractions
  https://www.thecorestandards.org/Math/Content/4/NF/B/3/
- **4.NF.C.5** Addition of Tenths and Hundredths
  https://www.thecorestandards.org/Math/Content/4/NF/C/5/
- **4.NF.C.6** Decimals with Tenths and Hundredths
  https://www.thecorestandards.org/Math/Content/4/NF/C/6/
- **4.NBT.A.1** Place Value Relationships through 1,000,000
  https://www.thecorestandards.org/Math/Content/4/NBT/A/1/
- **4.NBT.A.3** Compare, Order, and Round
  https://www.thecorestandards.org/Math/Content/4/NBT/A/3/

Standards references

Source: https://www.thecorestandards.org/Math/

- **4.NBT.B.4** Whole-Number Operations
  https://www.thecorestandards.org/Math/Content/4/NBT/B/4/
- **4.OA.A.2** Multiplicative Comparison
  https://www.thecorestandards.org/Math/Content/4/OA/A/2/
- **4.MD.A.1** Measurement Conversion
  https://www.thecorestandards.org/Math/Content/4/MD/A/1/
- **4.MD.A.3** Creation and Design
  https://www.thecorestandards.org/Math/Content/4/MD/A/3/
- **4.OA.C.5** Features of Patterns
  https://www.thecorestandards.org/Math/Content/4/OA/C/5/
- **4.NBT.B.5** Multi-Digit Multiplication
  https://www.thecorestandards.org/Math/Content/4/NBT/B/5/
- **4.NBT.B.6** Multi-Digit Division
  https://www.thecorestandards.org/Math/Content/4/NBT/B/6/
- **4.OA.A.3** Solve Problems with Multiplication and Division
  https://www.thecorestandards.org/Math/Content/4/OA/A/3/
- **4.G.A.1** Points, Lines, Segments, Rays, and Angles
  https://www.thecorestandards.org/Math/Content/4/G/A/1/

Standards references

Source: https://www.thecorestandards.org/Math/

- **4.MD.C.5** The Size of an Angle
  https://www.thecorestandards.org/Math/Content/4/MD/C/5/
- **4.MD.C.7** Angle Analysis
  https://www.thecorestandards.org/Math/Content/4/MD/C/7/
- **4.G.A.3** Side Lengths, Angles, and Lines of Symmetry
  https://www.thecorestandards.org/Math/Content/4/G/A/3/
- **4.G.A.2** Reason about Attributes to Solve Problems
  https://www.thecorestandards.org/Math/Content/4/G/A/2/
- **5.MD.C.4** Unit Cubes and Volume
  https://www.thecorestandards.org/Math/Content/5/MD/C/4/
- **5.MD.C.5** Creation and Design
  https://www.thecorestandards.org/Math/Content/5/MD/C/5/
- **5.NF.B.3** Fractions as Quotients
  https://www.thecorestandards.org/Math/Content/5/NF/B/3/
- **5.NF.B.4** Fraction Multiplication
  https://www.thecorestandards.org/Math/Content/5/NF/B/4/
- **5.NF.B.7** Problem Solving with Fractions
  https://www.thecorestandards.org/Math/Content/5/NF/B/7/

Standards references

Source: https://www.thecorestandards.org/Math/

- **5.NBT.B.5** Multi-digit Multiplication Using the Standard Algorithm
  https://www.thecorestandards.org/Math/Content/5/NBT/B/5/
- **5.NBT.B.6** Multiply and Divide Whole Numbers
  https://www.thecorestandards.org/Math/Content/5/NBT/B/6/
- **5.NBT.A.3** Numbers to Thousandths
  https://www.thecorestandards.org/Math/Content/5/NBT/A/3/
- **5.NBT.B.7** Fraction and Decimal Operations
  https://www.thecorestandards.org/Math/Content/5/NBT/B/7/
- **5.MD.A.1** Measurement Conversions and Powers of 10
  https://www.thecorestandards.org/Math/Content/5/MD/A/1/
- **5.NF.A.1** Add and Subtract Fractions with Unlike Denominators
  https://www.thecorestandards.org/Math/Content/5/NF/A/1/
- **5.NF.B.5** The Size of a Product
  https://www.thecorestandards.org/Math/Content/5/NF/B/5/
- **5.G.A.2** The Coordinate Grid
  https://www.thecorestandards.org/Math/Content/5/G/A/2/
- **5.G.B.4** The Hierarchy of Shapes
  https://www.thecorestandards.org/Math/Content/5/G/B/4/

Standards references

Source: https://www.thecorestandards.org/Math/

- **5.OA.B.3** Numerical Patterns
  https://www.thecorestandards.org/Math/Content/5/OA/B/3/