Section A: Practice Problems
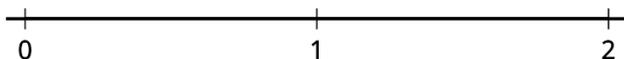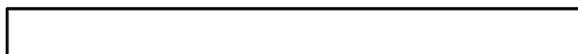
1. Pre-unit

    a. Locate $\frac{6}{4}$ on the number line.

    b. Explain or show why your point represents $\frac{6}{4}$.

2. Pre-unit

    Shade $\frac{3}{4}$ of the rectangle. Explain or show your reasoning.

3. Pre-unit

    Explain or show why $\frac{4}{3} = 4 \times \frac{1}{3}$.

4. Pre-unit

    Each workbook is $\frac{3}{8}$ inch thick. How many inches thick is a stack of 5 workbooks? Explain or show your reasoning.

5. Pre-unit

    a. There are 36 fish in 4 aquariums. There are the same number of fish in each aquarium. How many fish are in each aquarium? Show or explain your reasoning.

    b. There are 24 dogs at a shelter. There are 4 times as many dogs as cats at the shelter. How many cats are there at the shelter? Show or explain your reasoning.
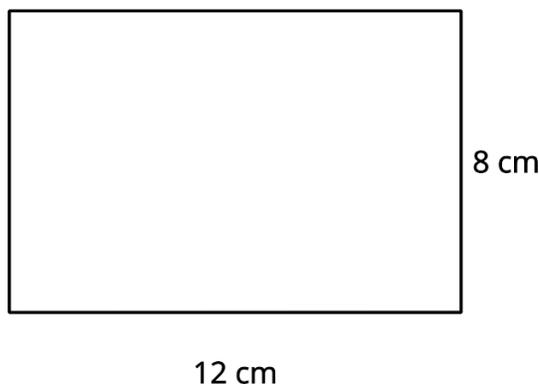
6. Pre-unit

    A bottle holds $\frac{7}{10}$ liter of water. How much water do 6 bottles hold? Explain or show your reasoning.

7. Pre-unit

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│                          │  8 cm
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          12 cm
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What is the area of the rectangle? Explain or show your reasoning.

a. 3 students equally share 18 sheets of construction paper for an art project. How many sheets of paper does each student get? Explain or show your reasoning.

b. 3 students equally share 1 tube of glue for an art project. How much glue does each student get? Explain or show your reasoning.

(From Unit 2, Lesson 1.)

a. 4 hikers equally share 3 liters of water. How many liters of water does each hiker drink? Explain or show your reasoning.

b. 4 hikers equally share 5 liters of water. How many liters of water does each hiker drink? Explain or show your reasoning.
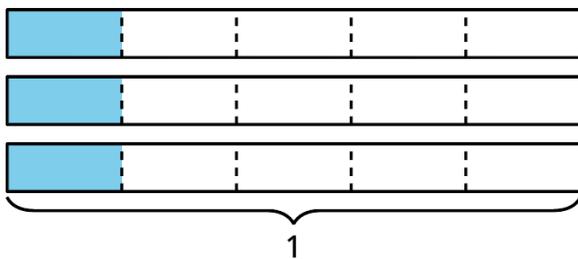
(From Unit 2, Lesson 2.)

a. Jada cuts an 11 inch strip of paper into 5 equal parts. How many inches long is each part?

b. Jada cuts a strip of paper into 5 equal parts. Each part is $\frac{7}{5}$ inches long. How long was the strip of paper?

(From Unit 2, Lesson 3.)

8.

a.   Describe a situation that the diagram could represent.

b.   Write an equation that represents the diagram and the situation.

(From Unit 2, Lesson 4.)

9.   Decide whether each equation is true or false. Explain or show your reasoning.

a. $3 \div 7 = \frac{3}{7}$.

b. $18 \div 5 = \frac{5}{18}$.

c. $15 \div 6 = 2\frac{1}{2}$.

(From Unit 2, Lesson 5.)

10.   Exploration

a.   Describe a situation in the classroom or at home where you share something equally with your classmates or family that results in fractional size parts.

b.   Draw a picture to represent the situation.

c.   Write a division equation to represent the situation.

11.   Exploration

Elena is traveling to visit her grandparents who live 125 miles away.

a.   Elena stops for lunch $\frac{2}{3}$ of the way. How far has Elena traveled? Explain or show your reasoning.

b.   Elena enters the city where her grandmother lives after 110 miles. Is she more or less than $\frac{9}{10}$ of the way there? Explain or show your reasoning.

12. Exploration

    a.   Describe a situation that represents the equation $4 \div 6 = \frac{4}{6}$.

    b.   Draw a diagram to represent the situation.