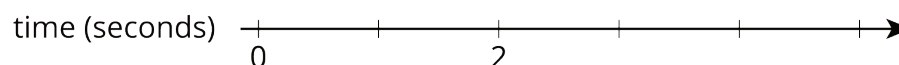# Lesson 6 Practice Problems

1. A scooter travels 30 feet in 2 seconds at a constant speed.

distance (feet)   0   30

time (seconds)   0   2
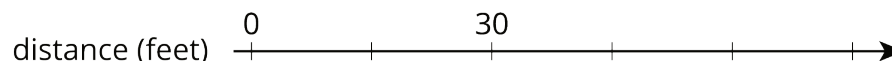
a. What is the speed of the scooter in feet per second?

b. Complete the double number line to show the distance the scooter travels after 1, 3, 4, and 5 seconds.

c. A skateboard travels 55 feet in 4 seconds. Is the skateboard going faster, slower, or the same speed as the scooter?

2. The double number line shows that 4 pounds of tomatoes cost $14. Draw tick marks and write labels to show the prices of 1, 2, and 3 pounds of tomatoes.

pounds of tomatoes   0   4

cost in dollars   0   14
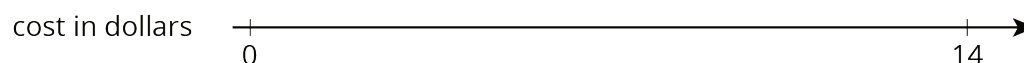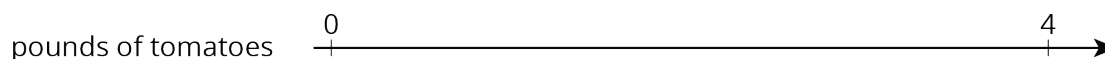
3. 4 movie tickets cost $48. At this rate, what is the cost of:

a. 5 movie tickets?

b. 11 movie tickets?

4. Priya bought these items at the grocery store. Find each unit price.

    a. 12 eggs for $3. How much is the cost per egg?

    b. 3 pounds of peanuts for $7.50. How much is the cost per pound?

    c. 4 rolls of toilet paper for $2. How much is the cost per roll?

    d. 10 apples for $3.50. How much is the cost per apple?

5. Han ran 10 meters in 2.7 seconds. Priya ran 10 meters in 2.4 seconds.

    a. Who ran faster? Explain how you know.

    b. At this rate, how long would it take each person to run 50 meters? Explain or show your reasoning.

6. Clare made a smoothie with 1 cup of yogurt, 3 tablespoons of peanut butter, 2 teaspoons of chocolate syrup, and 2 cups of crushed ice.

   a. Kiran tried to double this recipe. He used 2 cups of yogurt, 6 tablespoons of peanut butter, 5 teaspoons of chocolate syrup, and 4 cups of crushed ice. He didn't think it tasted right. Describe how the flavor of Kiran's recipe compares to Clare's recipe.

   b. How should Kiran change the quantities that he used so that his smoothie tastes just like Clare's?

   (From Unit 2, Lesson 2.)

7. Each of these is a pair of equivalent ratios. For each pair, explain why they are equivalent ratios or draw a representation that shows why they are equivalent ratios.

   a. $5 : 1$ and $15 : 3$

   b. $25 : 5$ and $10 : 2$

   c. $198 : 1{,}287$ and $2 : 13$

   (From Unit 2, Lesson 3.)

Accelerated 6 Unit 2
Lesson 6

CC BY Open Up Resources. Adaptations CC BY IM.

3