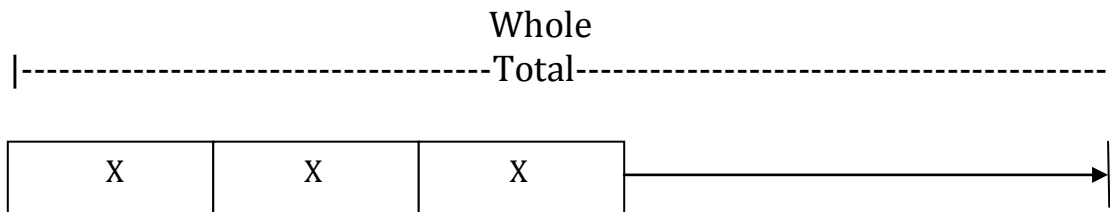


Algebra Concepts, Unit 2, Lesson 3

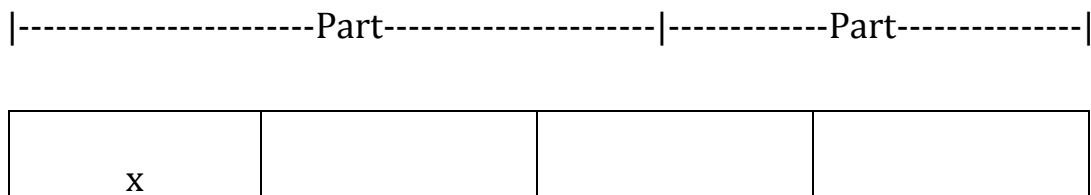
Solving Two-Step Linear Equations Using Visual Models

Many situations in life are modeled by more than one operation. Now that you have learned to solve one-step equations with addition, subtraction, multiplication and division, we are ready to move to the next level. Here are the two part-whole models you will use:

Multiplication and Addition

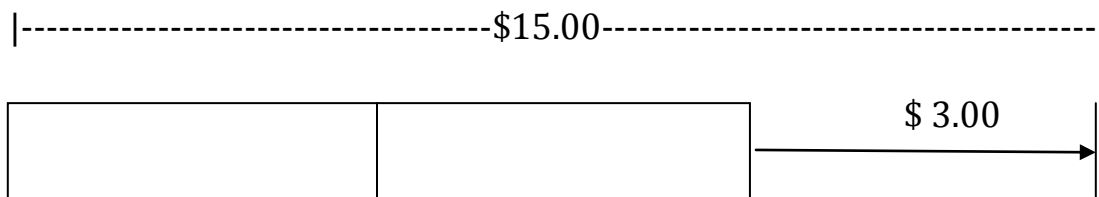


Multiplication and Subtraction



Example 1

Noah paid \$15.00 for 2 tickets to a movie and a drink. He paid \$3 for the drink. How much was each ticket to the movie?



Alexis bought 3 packages of napkins. She used 20 at a birthday party for her friend. There were 52 napkins left after the party. How many napkins were in each package?

|-----20-----|-----52-----|

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Guided Practice

Find the value of the question mark or x. Then answer the question in a complete sentence.

- Ms. Dubois drove for three hours and had 20 miles left on a 140-mile journey. What was Ms. Dubois' average speed during the 3-hour drive? Answer the question with a complete sentence.

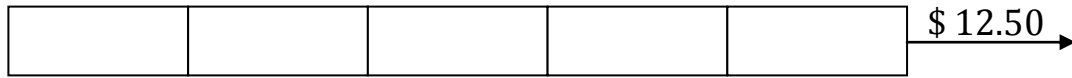
|-----140-----|

			→ 20 →
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|-----1 hour-----|

2. Jared bought 5 tickets to the movies. He had \$50 when he left the house. After buying the movie tickets, Jared had \$12.50 left. How much was each movie ticket?

|-----\$50-----|



|--1 ticket--|

3. Jon worked for 6 hours at a restaurant. It cost him \$3 in gas to get to work. He had \$51 in net earnings after he paid for the gas. How much did Jon earn per hour?

|-----51-----|--3--|



|---1 hour---|

Draw your own model.

4. Dylan bought three pizzas and a 2-liter bottle of soda. The soda cost \$2.19 and the total bill was \$24.69. What is the cost of 1 pizza?

Extension

1. Use the following rule to fill in the table.

$$P = 12h$$

Hours (h)	0	5	10	15	20	25	30	35	40
Pay (p)									

2. What is clear to you so far in this unit and what is still confusing?