

Smith Blizzard Bag #2 7th Grade

Learning Targets:

- I can write a proportion from verbal form and solve a proportion with 70% accuracy.
- I can use algebra and the cross products rule to solve a proportion with 70% accuracy.

Key Definitions: Proportion – an equation that states that two ratios are equivalent.

Directions:

- To complete Blizzard Bag #2, you must print off the study guide and study guide answers and use that to complete Worksheet Practice A 8.5. This handout will be due upon our return to school and it is a formative assessment.

Standards:

- 7.RP.2a: Recognize and represent proportional relationships between quantities. a) Decide whether two quantities are in a proportional relationship.

LESSON
9.2

Name _____ Date _____

Practice A

For use with pages 419–424

Solve the proportion.

1. $\frac{2}{5} = \frac{p}{100}$

2. $\frac{a}{40} = \frac{30}{100}$

3. $\frac{9}{b} = \frac{18}{100}$

4. Solve the proportion $\frac{1}{2} = \frac{p}{100}$ to write $\frac{1}{2}$ as a percent.

5. Solve the proportion $\frac{4}{5} = \frac{p}{100}$ to write $\frac{4}{5}$ as a percent.

6. Solve the proportion $\frac{1}{6} = \frac{p}{100}$ to write $\frac{1}{6}$ as a percent.

Match the question with the correct proportion.

7. 70 is 40% of what number?

A. $\frac{40}{70} = \frac{p}{100}$

8. What percent of 70 is 40?

B. $\frac{a}{40} = \frac{70}{100}$

9. What is 70% of 40?

C. $\frac{70}{b} = \frac{40}{100}$

For the given question, identify the values of a , b , and p in the proportion $\frac{a}{b} = \frac{p}{100}$. Then use the proportion to answer the question.

10. What percent of 40 is 8?

11. What number is 25% of 36?

12. 60 is 20% of what number?

13. What percent of 80 is 8?

14. You have 40 books on your bookshelf. If 16 are comic books, what percent of the books on your bookshelf are comic books?

15. Ten percent of Denmark's total area is forest and woodland. The total area of Denmark is 43,070 square kilometers. How many square kilometers of Denmark's area are forest and woodland?

16. Twenty percent of the trees in a park are oak trees. There are 7 oak trees in the park. How many trees are in the park in all?

Answer Key

Study Guide

1. 20 2. 3 3. 17.5 4. 17 5. 6 earned runs 6. 200 are medical volunteers.

LESSON
8.5

Name _____ Date _____

Practice A

For use with pages 392–398

Lesson 8.5

Solve the equation.

1. $24 = 3x$ 2. $90 = 5x$ 3. $180 = 15x$

Write the proportion described by the situation.

4. x is to 7 as 12 is to 14.
 5. 26 is to 32 as m is to 4.
 6. 1 is to p as 4 is to 6.
 7. 2 is to 3 as 18 is to z .

Match the proportion with its cross products.

8. $\frac{5}{12} = \frac{x}{4}$ A. $4x = 12 \cdot 5$
 9. $\frac{5}{12} = \frac{4}{x}$ B. $5 \cdot 4 = 12x$
 10. $\frac{x}{12} = \frac{5}{4}$ C. $5x = 12 \cdot 4$

Use the cross products property to solve the proportion.

11. $\frac{3}{4} = \frac{x}{12}$ 12. $\frac{10}{m} = \frac{5}{6}$ 13. $\frac{7}{2} = \frac{21}{b}$
14. Fred can read about 1250 words in 5 minutes. About how many words can he read in 60 minutes?
15. The national flag of Fiji has a width-to-length ratio of 1 : 2. What is the width of an 18-inch long Fijian flag?
16. A filter for an aquarium cleans 400 gallons of water in 60 minutes. How many gallons of water does the filter clean in 5 minutes?
17. There are 8 grams of fiber in 1 cup of rolled oats. How many cups of rolled oats are needed to get 12 grams of fiber?