

Lesson 6 ~ Write and Solve Proportions

Name _____

Period _____

Date _____

Solve each proportion.

1. $\frac{3}{4} = \frac{x}{20}$

2. $\frac{5}{7} = \frac{25}{y}$

3. $\frac{8}{28} = \frac{a}{7}$

4. $\frac{x}{32} = \frac{3}{16}$

5. $\frac{6}{12} = \frac{y}{48}$

6. $\frac{3}{15} = \frac{5}{b}$

7. $\frac{11}{14} = \frac{x}{28}$

8. $\frac{26}{30} = \frac{x}{15}$

9. $\frac{5}{20} = \frac{4}{y}$

Determine whether each pair of ratios forms a proportion.

10. $\frac{5}{9}$ and $\frac{40}{44}$

11. $\frac{18}{21}$ and $\frac{12}{14}$

12. $\frac{7}{12}$ and $\frac{35}{60}$

Write a proportion for each phrase and solve it.

13. 3 feet in 1 second; 21 feet in x seconds

14. 7 pounds for \$10.43; 10 pounds for a dollars

15. 25 miles in 30 minutes; y miles in 48 minutes

Lesson 7 ~ Problem-Solving With Proportions

Name _____ Period _____ Date _____

Solve each proportion.

1. $\frac{7}{9} = \frac{x}{63}$

2. $\frac{10}{25} = \frac{y}{20}$

Solve each problem using a proportion. The answers are listed at the bottom of the page out of order without units. Cross out each answer once you find it.

- A bicyclist rides 18 miles in 2 hours. How far will the bicyclist ride at this speed in 5 hours?
- Four posters cost \$19.20. How many posters can you buy for \$48.00?
- You paid \$28.00 for 8 gallons of gasoline. How much would you pay for 15 gallons of gasoline?
- Tabitha walked 13.5 miles in three hours. At that speed, how many miles will she walk in seven hours?
- Luis found a new text messaging plan which will charge him \$2.00 for 80 messages. Using this plan, how much would he pay for 900 text messages in one month?
- A truck driver travels 93 miles in 1 hour and 30 minutes. At this rate, how far will he travel in 4 hours?
- Mark walked 21,129 feet in one hour. At that speed, about how many miles will he walk in two hours?
- A 12 ounce soda costs \$1.25 in the vending machine. At that rate, how much would a 32 ounce soda cost?

Answers: 31.5 10 248 8 22.50 45 3.33 52.50