

Chapter 5 Take Home Quiz #1

For use after Section 5.3

Write the ratio as a fraction in simplest form.

1. 24 messages : 10 messages 2. 5 meters to 20 meters

Use the ratio table to find the unit rate with the specified units.

3. miles per gallon

Gallons	0	2	4	6
Miles	0	31	62	93

4. cost per box

Boxes	3	6	9
Cost	\$3.60	\$7.20	\$10.80

Tell whether the ratios form a proportion.

5. $\frac{4}{7}, \frac{24}{35}$ 6. $\frac{11}{12}, \frac{33}{36}$

Tell whether the two rates form a proportion.

7. 25 cars in 5 days; 60 cars in 12 days
8. 14 books in 2 boxes; 20 books in 3 boxes

Use the table to write a proportion.

9.

	Cashews	Peanuts
Dollars	12	16
Pounds	3	p

10.

	Monday	Tuesday
Emails	e	30
Hours	8	10

Solve the proportion.

11. $\frac{x}{10} = \frac{4}{5}$ 12. $\frac{8}{9} = \frac{p}{81}$

13. The number of pictures your printer can print are shown in the table. Find the rate in pictures per minute.

Minutes	2	4	6	8
Pictures	16	32	48	64

14. On Monday, you swim 12 laps in 30 minutes. On Tuesday, you swim 15 laps in 45 minutes. Are these rates proportional? Explain.
15. A chemical compound requires 8 ounces of Chemical A and 12 ounces of Chemical B. A mixture contains 24 ounces of Chemical A and 30 ounces of Chemical B. How can you fix the mixture to make the chemical compound?
16. In an animal shelter, the ratio of dogs to cats is 5 to 3. There are 25 dogs. Write and solve a proportion to find the number c of cats.

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____

Chapter 5 **Take Home Quiz #2** For use after Section 5.6

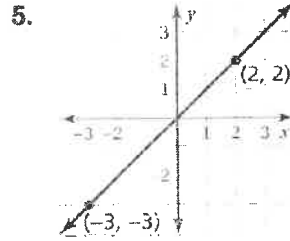
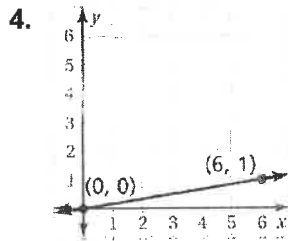
Solve the proportion.

1. $\frac{7}{3} = \frac{b}{18}$

2. $\frac{10}{9} = \frac{5}{k}$

3. $\frac{3.6}{m} = \frac{1.2}{3.6}$

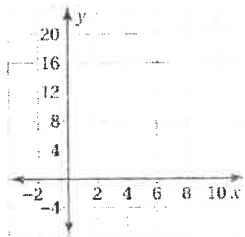
Find the slope of the line.



Graph the data. Then find and interpret the slope of the line through the points.

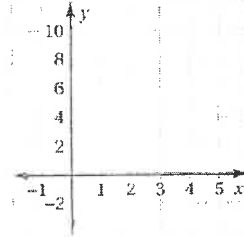
6.

Day, x	0	2	4	6
Inches, y	0	8	16	24



7.

Pounds, x	3	4	5	6
Cost, y	6	8	10	12



Tell whether x and y show direct variation. Explain your reasoning.

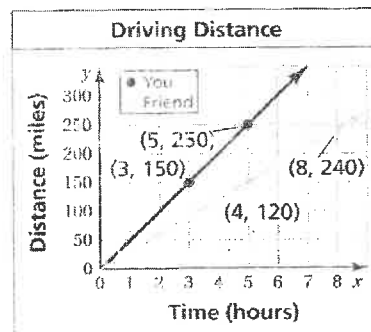
8. $xy = 5$

9. $2x = 3y$

10. There are 25 students in a classroom. The ratio of girls to boys is 3 to 2. How many boys and how many girls are there in the classroom?

11. The graph shows the distance you and your friend drive on a trip.

- a. Find and interpret the slope of each line.
b. How much faster are you traveling than your friend?



Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. See left.

7. See left.

8. _____

9. _____

10. _____

11. a. _____

b. _____