

CRCT GPS Practice Chapter 5

LESSON 5-1

One day, a veterinarian saw 20 cats and 30 dogs. Write each ratio in all three forms. Make sure each ratio is in simplest form.

- cats to dogs
 - dogs to cats
 - cats to animals
4. A compact car gets 135 miles per 5 gallons of gas. A midsize car gets 210 miles per 10 gallons of gas. Which car gets more miles per gallon?

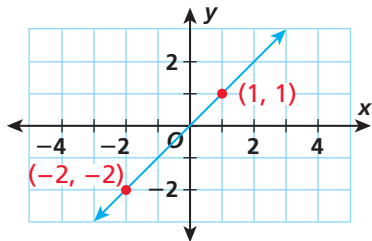
LESSON 5-2

- Jamie's family drives 350 miles to her grandparents' house in 7 hours. What is their average speed in miles per hour?
- A store sells milk in 3 sizes. The 128 fl oz container costs \$4.59, the 64 fl oz container costs \$3.29, and the 32 fl oz container costs \$1.99. Which size milk has the lowest price per fluid ounce?

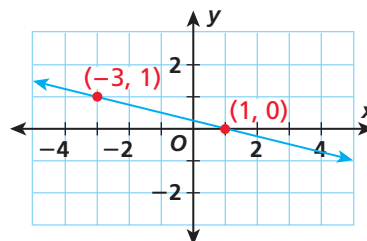
LESSON 5-3

Tell whether the slope is positive or negative. Then find the slope.

7.



8.



Use the given slope and point to graph each line.

9. $\frac{1}{2}$; (2, 1) 10. $-\frac{2}{3}$; (4, 1) 11. $-\frac{4}{5}$; (-2, -3) 12. 3; (1, -3)

LESSON 5-4

Determine whether the ratios are proportional.

13. $\frac{25}{40}, \frac{30}{48}$ 14. $\frac{32}{36}, \frac{24}{28}$ 15. $\frac{5}{6}, \frac{15}{18}$ 16. $\frac{21}{49}, \frac{18}{42}$

Find a ratio equivalent to each ratio. Then use the ratios to write a proportion.

17. $\frac{72}{81}$ 18. $\frac{15}{40}$ 19. $\frac{24}{32}$ 20. $\frac{5}{13}$

LESSON 5-5

Use cross products to solve each proportion.

21. $\frac{8}{n} = \frac{12}{18}$ 22. $\frac{4}{7} = \frac{p}{28}$ 23. $\frac{u}{14} = -\frac{21}{28}$ 24. $\frac{3}{21} = \frac{t}{49}$
 25. $\frac{y}{35} = \frac{63}{45}$ 26. $-\frac{6}{n} = -\frac{48}{12}$ 27. $\frac{32}{x} = \frac{52}{117}$ 28. $\frac{56}{80} = \frac{105}{m}$

29. The ratio of a person's weight on Earth to his weight on the Moon is 6 to 1. Rafael weighs 90 pounds on Earth. How much would he weigh on the Moon?

LESSON 5-6

Choose the most appropriate customary unit for each measurement. Justify your answer.

30. the weight of 6 crackers
 31. the capacity of a pond
 32. the capacity of a baby's bottle
 33. the length of a marathon

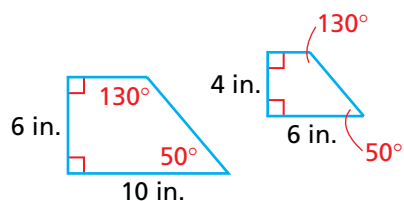
Convert each measure.

34. 8 pt to cups
 35. 5 ft to inches
 36. 6.5 lb to ounces
 37. The directions on Brant's protein powder say to mix four scoops with 16 ounces of milk to make a protein drink. If Brant has a quart of milk, how many protein drinks can he make?

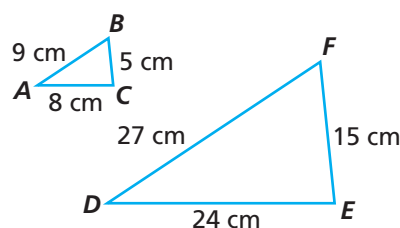
LESSON 5-7

Use the properties of similarity to determine whether the figures are similar.

38.



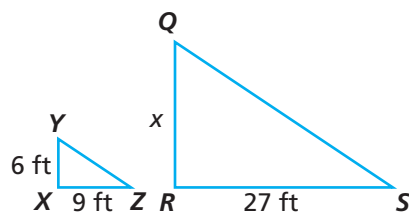
39.



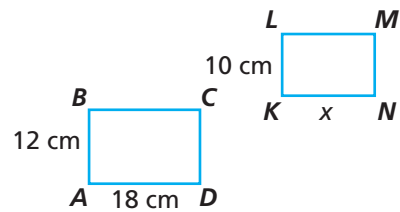
LESSON 5-8

Find the unknown length. $\triangle XYZ \sim \triangle RQS$ and $\square ABCD \sim \square KLMN$.

40.



41.



42. A 5-foot-tall girl casts a 7-foot-long shadow. A nearby telephone pole casts a 35-foot-long shadow. What is the height of the telephone pole?

LESSON 5-9

43. A scale model of the Empire State Building is 3.125 feet tall with a scale factor of $\frac{1}{400}$. Find the height of the actual Empire State Building.
 44. Kira is drawing a map with a scale of 1 inch = 30 miles. The actual distance from Park City to Gatesville is 80 miles. How far from the dot for Gatesville should Kira draw the dot for Park City?