

Pre-Algebra Chapter 6, Review

Name \_\_\_\_\_ Date \_\_\_\_\_ Per \_\_\_\_\_

Remember to show your work and check it.

Write each ratio in simplest form.

1. 27 to 54      2. 8:12      1. \_\_\_\_\_

2. \_\_\_\_\_

3.  $\frac{21}{42}$       4. 6:30      3. \_\_\_\_\_

4. \_\_\_\_\_

Write the given ratio in two other forms:

5. 8:19      5. \_\_\_\_\_

\_\_\_\_\_

6. 4 to 5      6. \_\_\_\_\_

\_\_\_\_\_

7.  $\frac{7}{9}$       7. \_\_\_\_\_

\_\_\_\_\_

Order the ratios from least to greatest.

8.  $\frac{51}{25}$ , 5:4, 13 to 10, 33:20,  $\frac{17}{20}$       8. \_\_\_\_\_

9. 9:2, 13 to 3,  $\frac{25}{6}$ , 28 to 7, 40:12      9. \_\_\_\_\_

Find the unit rate.

10.  $\frac{\$195}{15 \text{ hours}}$       11.  $\frac{392 \text{ miles}}{16 \text{ gallons}}$       10. \_\_\_\_\_

11. \_\_\_\_\_

12.  $\frac{1326 \text{ students}}{39 \text{ teachers}}$

13.  $\frac{1260 \text{ calories}}{5.25 \text{ hours}}$

12. \_\_\_\_\_

13. \_\_\_\_\_

Write the equivalent rate.

14.  $\frac{728 \text{ glns}}{1 \text{ week}} = \frac{? \text{ glns}}{1 \text{ day}}$

15.  $\frac{\$249}{5 \text{ days}} = \frac{\$?}{1 \text{ hour}}$

14. \_\_\_\_\_

15. \_\_\_\_\_

16.  $\frac{9 \text{ km}}{1 \text{ h}} = \frac{? \text{ m}}{1 \text{ second}}$

17.  $\frac{20 \text{ oz}}{1 \text{ inch}} = \frac{? \text{ pounds}}{1 \text{ foot}}$

16. \_\_\_\_\_

17. \_\_\_\_\_

Tell whether the ratios form a proportion.

18.  $\frac{8}{9} , \frac{88}{99}$

19.  $\frac{10}{43} , \frac{90}{54}$

18. \_\_\_\_\_

19. \_\_\_\_\_

Solve the proportion.

20.  $\frac{5}{9} = \frac{x}{36}$

21.  $\frac{x}{7} = \frac{28}{49}$

20. \_\_\_\_\_

21. \_\_\_\_\_

22.  $\frac{x}{120} = \frac{1}{10}$

23.  $\frac{4}{4.4} = \frac{x}{6.6}$

22. \_\_\_\_\_

23. \_\_\_\_\_

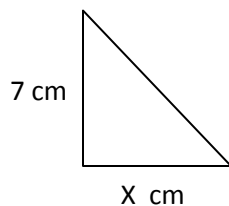
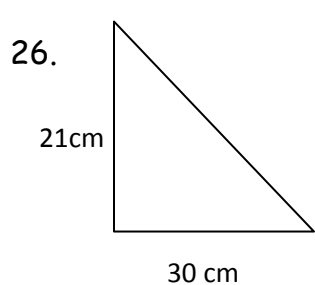
24.  $\frac{2}{3.5} = \frac{x}{17.5}$

25.  $\frac{25}{28} = \frac{375}{x}$

24. \_\_\_\_\_

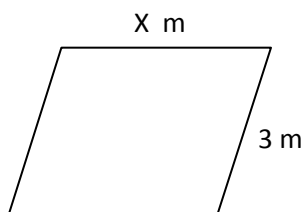
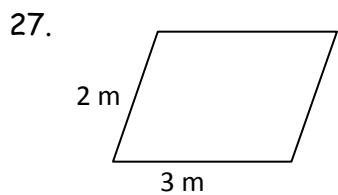
25. \_\_\_\_\_

Find the value of  $x$  in each pair of similar figures.



26. \_\_\_\_\_

27. \_\_\_\_\_



The map has a scale of 1 cm: 20 km. Find the actual distance.

28. 7 cm

29. 10 cm

28. \_\_\_\_\_

29. \_\_\_\_\_

30. 40 km

31. 80 km

30. \_\_\_\_\_

31. \_\_\_\_\_

Write the scale without units.

32. 1 in : 16 ft

33. 1 in : 45 yd

32. \_\_\_\_\_

33. \_\_\_\_\_

34. 1 cm : 3.5 m

35. 1 mm : 61 cm

34. \_\_\_\_\_

35. \_\_\_\_\_

36. One box of cereal is 16 oz. and cost \$3. A smaller box of the same type of cereal is 11.5 oz. and cost \$2. Which box of cereal is the better buy.

36. \_\_\_\_\_