Lesson 5-3

Understanding Proportions

Do the ratios in each pair form a proportion?

1. $\frac{8}{9}, \frac{4}{3}$

_____

2. $\frac{20}{16}, \frac{18}{15}$

_____

3. $\frac{18}{12}, \frac{21}{14}$

_____

4. $\frac{21}{27}, \frac{35}{45}$

_____

5. $\frac{18}{22}, \frac{45}{55}$

_____

6. $\frac{38}{52}, \frac{57}{80}$

_____

7. $\frac{10}{65}, \frac{18}{87}$

_____

8. $\frac{51}{48}, \frac{68}{64}$

_____

Find the value that completes each proportion.

9. $\frac{4}{5} = \frac{?}{15}$

_____

10. $\frac{8}{?} = \frac{4}{15}$

_____

11. $\frac{3}{2} = \frac{21}{?}$

_____

12. $\frac{?}{5} = \frac{32}{20}$

_____

13. $\frac{7}{8} = \frac{?}{32}$

_____

14. $\frac{5}{4} = \frac{15}{?}$

_____

15. 8 to 12 = __?__ to 6

_____

16. 9 : 12 = 3 : __?__

_____

17. In 1910, there were about 220 families for every 1,000 people in the United States. If a certain town had a population of 56,000, about how many families would you expect to find in the town?

_____

18. For every 100 families with TV sets, about 12 families like watching sports. In a town of 23,400 families who all have TV sets, how many families would you expect to like watching sports?

_____

19. In 1800, there were only about 6 people per square mile of land in the U.S. What was the approximate population in 1800 if there were about 364,700 square miles in the U.S.?

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