LESSON 2.6

Practice C

For use with the lesson "Write Ratios and Proportions"

Solve the proportion.

1. $\dfrac{14}{105} = \dfrac{x}{315}$

2. $\dfrac{c}{75} = \dfrac{72}{300}$

3. $\dfrac{6}{8} = \dfrac{d}{3.2}$

4. $\dfrac{1.5}{6.5} = \dfrac{y}{39}$

5. $\dfrac{1.8}{2.4} = \dfrac{a}{0.5}$

6. $\dfrac{10}{31} = \dfrac{5w}{62}$

7. $\dfrac{2m}{7} = \dfrac{6}{21}$

8. $\dfrac{b+2}{10} = \dfrac{35}{50}$

9. $\dfrac{p-25}{140} = \dfrac{12}{42}$

Write the sentence as a proportion. Then solve the proportion.

10. 14 is to 17 as x is to 136.

11. 128 is to 200 as x is to 50.

12. x is to 6 as 0.8 is to 1.5.

13. 0.9 is to 3.6 as x is to 5.

14. $2x$ is to 7 as 18 is to 21.

15. 48 is to 125 as $3x$ is to 25.

16. Is it possible to write a proportion using the numbers 9, 12, 18, and 24? *Explain* your reasoning.

17. Stepping Stones You are painting a pattern on some plain terra cotta stones for a stepping path in your backyard. It took you 50 minutes to paint 2 stones. How many stones can you paint in 3 hours?

18. Beach Rental The table below shows the number of rentals at a beach shop during a recent week.

Type of equipment	Boogie boards	Inline skates	Volleyball net and ball
Number of rentals	42	80	32

a. Find the ratio of the number of boogie board and volleyball rentals to the number of inline skate rentals.

b. Find the ratio of the number of volleyball rentals to the number of all rentals.

c. Find the ratio of the number of boogie board and inline skate rentals to the number of all rentals.

19. Juice Bar One day, the ratio of people at a juice bar ordering smoothies to mixed juice drinks was 14 : 6. The juice bar sold a total of 120 drinks during the day.

a. Find the ratio of the number of smoothies ordered to the number of smoothies and mixed juice drinks ordered.

b. Use the ratio from part (a) to find the number of smoothies ordered.

c. How many more smoothies were ordered than mixed juice drinks?

20. Bird Watching For the last hour, you have been watching the birds that come up to your birdfeeder. You saw 6 cardinals, 9 chickadees, and 9 pigeons. In the next two hours, you saw a total of 36 birds. If the ratios of the number of each type of bird to the total number of birds were the same in these next two hours as they were in the first hour, how many of each type of bird did you see? *Explain* your reasoning.