

Name _____

5-9B Lesson Master**Questions on SPUR Objectives**

See pages 320–323 for objectives.

SKILLS Objective C

In 1-12, solve the given proportion.

1. $\frac{x}{-144} = \frac{8}{9}$

2. $\frac{3y}{81} = \frac{2}{6}$

3. $\frac{a}{a-5} = \frac{10}{11}$

4. $\frac{7}{19-c} = \frac{12}{c}$

5. $\frac{4d}{d+1} = \frac{8}{5}$

6. $\frac{4}{e-7} = \frac{9}{2e}$

7. $\frac{f+6}{3} = \frac{4f-1}{2}$

8. $\frac{5g-2}{8} = \frac{g-9}{2}$

9. $\frac{2h+1}{5} = \frac{7h}{15}$

10. $\frac{16-9y}{1-8y} = \frac{12}{5}$

11. $\frac{4-j}{3-j} = \frac{6}{7}$

12. $\frac{-1}{k+5} = \frac{18}{17k}$

PROPERTIES Objective D13. If $\frac{5}{w} = \frac{26}{15}$, what does $26w$ equal? _____

14. Complete the phrase. "3 is to 27 as 7 is to _____."

USES Objective J

15. The ratio of the lengths of two snakes is 3 to 2. The shorter snake is 5 feet long. How long is the other snake? _____

16. Beth is planning to make a patriotic quilt using red, white, and blue fabrics. She wants to use twice as much white in the quilt as red and blue together. The quilt uses 9 yards of 36-inch fabric. How many yards of each color should she buy?

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17. Bianca mixes 5 parts nuts to 2.5 parts dried apricots to make an afternoon snack. If she has 3 cups of apricots, how many cups of nuts does she need to make her snack? _____

18. A liquid treatment for the prevention of rose diseases is mixed with water at a rate of 1:64. If 8 cups of water are poured into a watering can, how many cups of the treatment should be added? _____

19. Pierce and Fabian have collected autographed baseballs. Pierce has 3 more than twice the number of baseballs Fabian has. The ratio of the number of baseballs that Fabian has collected to the number of baseballs Pierce has collected is 3:7. How many autographed baseballs does each have?

20. The state Department of Natural Resources uses a capture/recapture program to check the number of fish of various types in Long Lake. One year, 50 large-mouth bass were tagged. Two years later, of 20 large-mouth bass that were netted, 2 were tagged. Estimate the total number of large-mouth bass in Long Lake. _____

A landscaping company is hired to plant maple, ash, and locust trees along the streets of a new subdivision. The landscapers plant 3 times as many ash trees as maple trees and 20 more locust trees than ash trees. The ratio of the number of ash trees to the number of locust trees is 3:4.

21. How many of each type of tree is planted?

22. What percent of the trees planted are maple trees? _____