LESSON 8.2

NAME _____ DATE _____

Practice B

For use with pages 465–471

Complete the sentence.

1. If $\frac{p}{q} = \frac{5}{8}$, then $\frac{q}{p} = \frac{?}{?}$.

2. If $\frac{p}{q} = \frac{5}{8}$, then $\frac{p}{5} = \frac{?}{?}$.

3. If $\frac{p}{q} = \frac{5}{8}$, then $\frac{p+q}{q} = \frac{?}{?}$.

4. If $\frac{p}{q} = \frac{5}{8}$, then $\frac{?}{?} = \frac{13}{8}$.

Decide whether the statement is *true* or *false*.

5. If $\frac{x}{y} = \frac{2}{9}$, then $\frac{y}{x} = \frac{9}{2}$.

6. If $\frac{x}{y} = \frac{2}{9}$, then $\frac{2}{y} = \frac{x}{9}$.

7. If $\frac{x}{y} = \frac{2}{9}$, then $\frac{9}{y} = \frac{2}{x}$.

8. If $\frac{x}{y} = \frac{2}{9}$, then $\frac{x-y}{y} = \frac{7}{9}$.

Find the geometric mean of the two numbers.

9. 6 and 10

10. 8 and 9

11. 5 and 24

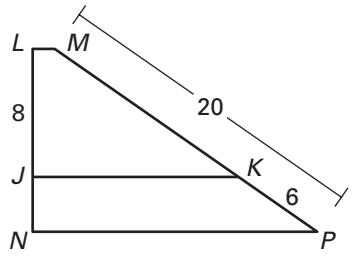
12. 10 and 15

13. 12 and 16

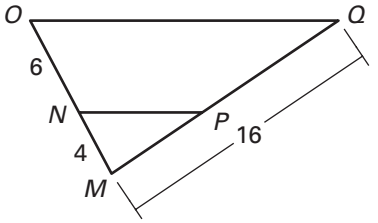
14. 20 and 24

Use the diagram and the given information to find the unknown length.

15. **Given:** $\frac{LJ}{JN} = \frac{MK}{KP}$, find JN.



16. **Given:** $\frac{MN}{NO} = \frac{MP}{PQ}$, find PQ.



17. In December 1999, the exchange rate of Mexican pesos to American dollars was 9.52 to 1. You paid 450 pesos for a jacket. Use the following verbal model to find the price of the jacket in dollars.

$$\frac{\text{Price in pesos}}{\text{Price in dollars}} = \frac{9.52 \text{ pesos}}{1 \text{ dollar}}$$

18. In December 1999, the exchange rate of Canadian dollars to American dollars was 1 to 0.68. You paid \$30.00 (in Canadian dollars) for a sweater. What was the price of the sweater in American dollars?

19. The Wright brothers made the world's first flight in a power-driven airplane. The flight lasted for 12 seconds at an average speed of 10 feet per second. The ratio of the airplane's wingspan to the distance flown was 1:3. How long was the wingspan?