

Practice 5-4

Solving Proportions

Use mental math to solve for each value of n .

1. $\frac{n}{14} = \frac{20}{35}$ _____

2. $\frac{9}{6} = \frac{21}{n}$ _____

3. $\frac{24}{n} = \frac{16}{10}$ _____

4. $\frac{3}{4} = \frac{n}{10}$ _____

Solve each proportion using cross products.

5. $\frac{k}{8} = \frac{14}{4}$
 $k =$ _____

6. $\frac{u}{3} = \frac{10}{5}$
 $u =$ _____

7. $\frac{14}{6} = \frac{d}{15}$
 $d =$ _____

8. $\frac{5}{1} = \frac{m}{4}$
 $m =$ _____

9. $\frac{36}{32} = \frac{n}{8}$
 $n =$ _____

10. $\frac{5}{30} = \frac{1}{x}$
 $x =$ _____

11. $\frac{t}{4} = \frac{5}{10}$
 $t =$ _____

12. $\frac{9}{2} = \frac{v}{4}$
 $v =$ _____

Solve.

13. A contractor estimates it will cost \$2,400 to build a deck to a customer's specifications. How much would it cost to build five similar decks?
- _____

14. A recipe requires 3 c of flour to make 27 dinner rolls. How much flour is needed to make 9 rolls?
- _____

Solve using a calculator, paper and pencil, or mental math.

15. Mandy runs 4 km in 18 min. She plans to run in a 15 km race. How long will it take her to complete the race?
- _____

16. Ken's new car can go 26 miles per gallon of gasoline. The car's gasoline tank holds 14 gal. How far will he be able to go on a full tank?
- _____

17. Eleanor can complete two skirts in 15 days. How long will it take her to complete eight skirts?
- _____

18. Three eggs are required to make two dozen muffins. How many eggs are needed to make 12 dozen muffins?
- _____