

Practice

Direct and Inverse Variation

Solve. Assume that y varies directly as x .

1. If $y = -4$ when $x = 2$, find y when $x = -6$.

2. If $y = 16$ when $x = 4$, find y when $x = 6$.

3. If $y = -5$ when $x = 12.5$, find x when $y = 15$.

4. If $y = 7$ when $x = 4$, find y when $x = 12$.

5. If $y = 80$ when $x = 32$, find x when $y = 100$.

6. If $y = 198$ when $x = 22$, find y when $x = 182$.

7. If $y = 28$ when $x = 168$, find y when $x = 108$.

8. If $y = 24$ when $x = 6$, find y when $x = -4$.

Solve. Assume that y varies inversely as x .

9. If $y = -4$ when $x = 2$, find y when $x = -6$.

10. If $y = 16$ when $x = 4$, find y when $x = 6$.

11. If $y = -5$ when $x = 12.5$, find x when $y = 15$.

12. If $y = 7$ when $x = 4$, find y when $x = 12$.

13. If $y = 27$ when $x = 12$, find x when $y = -12$.

14. If $y = 6$ when $x = -4$, find x when $y = \frac{12}{5}$.

15. If $y = 60$ when $x = 80$, find x when $y = -20$.

16. If $y = 40$ when $x = 16$, find y when $x = 10$.