

Direct and Inverse Proportion *fluency*

ANSWERS

 **y is directly proportional to x. Use the first pair to find the missing y.**

1 $x = 3, y = 12 \rightarrow x = 5, y = ?$ $y = 20$

2 $x = 4, y = 20 \rightarrow x = 9, y = ?$ $y = 45$

3 $x = 2, y = 7 \rightarrow x = 10, y = ?$ $y = 35$

4 $x = 9, y = 45 \rightarrow x = 2, y = ?$ $y = 10$

5 $x = 8, y = 6 \rightarrow x = 20, y = ?$ $y = 15$

6 $x = 3, y = 1.5 \rightarrow x = 14, y = ?$ $y = 7$

 **y is directly proportional to x^2 . Use the first pair to find the missing y.**

7 $x = 3, y = 18 \rightarrow x = 5, y = ?$ $y = 50$

8 $x = 2, y = 8 \rightarrow x = 6, y = ?$ $y = 72$

9 $x = 5, y = 50 \rightarrow x = 3, y = ?$ $y = 18$

10 $x = 2, y = 12 \rightarrow x = 4, y = ?$ $y = 48$

11 $x = 5, y = 75 \rightarrow x = 2, y = ?$ $y = 12$

12 $x = 3, y = 4.5 \rightarrow x = 10, y = ?$ $y = 50$

 **y is inversely proportional to x. Use the first pair to find the missing y.**

13 $x = 4, y = 6 \rightarrow x = 3, y = ?$ $y = 8$

14 $x = 2, y = 10 \rightarrow x = 5, y = ?$ $y = 4$

15 $x = 3, y = 12 \rightarrow x = 9, y = ?$ $y = 4$

16 $x = 5, y = 8 \rightarrow x = 4, y = ?$ $y = 10$

17 $x = 1.5, y = 20 \rightarrow x = 6, y = ?$ $y = 5$

18 $x = 8, y = 2.5 \rightarrow x = 10, y = ?$ $y = 2$

 **y is inversely proportional to x^2 . Use the first pair to find the missing y.**

19 $x = 2, y = 5 \rightarrow x = 4, y = ?$ $y = 1.25$

20 $x = 1, y = 36 \rightarrow x = 3, y = ?$ $y = 4$

21 $x = 4, y = 3 \rightarrow x = 2, y = ?$ $y = 12$

22 $x = 2, y = 50 \rightarrow x = 5, y = ?$ $y = 8$

23 $x = 3, y = 9 \rightarrow x = 6, y = ?$ $y = 2.25$

24 $x = 5, y = 16 \rightarrow x = 4, y = ?$ $y = 25$

 **y is directly proportional to $\sqrt{x}$. Use the first pair to find the missing y.**

25 $x = 4, y = 6 \rightarrow x = 25, y = ?$ $y = 15$

26 $x = 9, y = 15 \rightarrow x = 16, y = ?$ $y = 20$

27 $x = 16, y = 8 \rightarrow x = 49, y = ?$ $y = 14$

28 $x = 1, y = 3 \rightarrow x = 36, y = ?$ $y = 18$

29 $x = 25, y = 20 \rightarrow x = 4, y = ?$ $y = 8$

30 $x = 36, y = 12 \rightarrow x = 81, y = ?$ $y = 18$