

INVERSE PROPORTION

Answer all of these questions. Remember to show your working out in all questions.

MAIN QUESTIONS

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| 1. If y is inversely proportional to x and $y = 10$ when $x = 2$, find y when $x = 5$ $y = 4$ | 2. If y is inversely proportional to x and $y = 6$ when $x = 3$, find x when $y = 9$ $x = 2$ |
| 3. If y is inversely proportional to x and $y = 12$ when $x = 4$, find y when $x = 6$ $y = 8$ | 4. If y is inversely proportional to x and $y = 15$ when $x = 5$, find x when $y = 25$ $x = 3$ |
| 5. If y is inversely proportional to x and $y = 20$ when $x = 10$, find y when $x = 25$ $y = 8$ | 6. If y is inversely proportional to x and $y = 9$ when $x = 7$, find x when $y = 21$ $x = 3$ |
| 7. If y is inversely proportional to x and $y = 14$ when $x = 2$, find y when $x = 7$ $y = 4$ | 8. If y is inversely proportional to x and $y = 18$ when $x = 3$, find x when $y = 6$ $x = 9$ |
| 9. If y is inversely proportional to x and $y = 24$ when $x = 4$, find y when $x = 8$ $y = 12$ | 10. If y is inversely proportional to x and $y = 30$ when $x = 5$, find x when $y = 50$ $x = 3$ |

11. If y is inversely proportional to x and $y = 16$ when $x = 8$, find y when $x = 32$ | $y = 4$

12. If y is inversely proportional to x and $y = 21$ when $x = 7$, find x when $y = 49$ | $x = 3$

13. If y is inversely proportional to x and $y = 28$ when $x = 4$, find y when $x = 14$ | $y = 8$

14. If y is inversely proportional to x and $y = 36$ when $x = 6$, find x when $y = 12$ | $x = 18$

15. If y is inversely proportional to x and $y = 40$ when $x = 10$, find y when $x = 25$ | $y = 16$

MASTER QUESTIONS



M1. It takes 8 people 15 days to build a wall. How long would it take 12 people to build the same wall? | 10 days

M2. A factory can produce 1200 widgets in 6 days with 10 machines. How many days would it take to produce 1200 widgets with 15 machines? | 4 days

M3. A car travelling at 60 mph takes 4 hours to complete a journey. How long would it take if the speed increased to 80 mph? | 3 hours

M4. A team of 5 workers can paint a house in 12 days. How many workers would be needed to paint the house in 6 days? | 10 workers

M5. A water tank can be filled by 6 pipes in 8 hours. How long would it take to fill the tank if 12 pipes were used? | 4 hours