

Questions

1. Given $y = 5x$, find the constant of proportionality k .
2. Given $y = (\frac{1}{2})x$, find k .
3. Given $y = 0.25x$, find k .
4. Given $7y = 21x$, find k (write $y = kx$).
5. Given $3x = y$, find k .
6. Given $y = (\frac{4}{3})x$, find k .
7. Given $y = -2x$, find k .
8. Given $y = 12x$, find k .
9. Given $2y = 8x$, find k .
10. Given $y = 7.5x$, find k .
11. Which has the larger constant k : $y = 3x$ or $y = 2x$?
12. Which has the larger k : $y = 0.8x$ or $y = 1.2x$?
13. Find k when $x = 10$ and $y = 50$ in the proportional relationship $y = kx$.
14. Find k when $x = 4$ and $y = 6$ in $y = kx$.
15. If $y = kx$ and $y = 9$ when $x = 3$, find k .
16. If $y = kx$ and $x = 5$ when $y = 20$, find k .
17. Given $y = (\frac{3}{5})x$, find k .
18. Table: x : 1, 2, 3; y : 4, 8, 12. Is this proportional? If yes, find k .
19. Table: x : 2, 4, 6; y : 6, 12, 18. Is this proportional? If yes, find k .
20. Table: x : 1, 2, 3; y : 2, 5, 8. Is this proportional? If yes, find k .
21. Table: x : 3, 6, 9; y : 9, 18, 27. Find k .
22. Table: x : 5, 10, 15; y : 15, 30, 45. Find k .
23. Table: x : 2, 3, 4; y : 5, 7.5, 10. Find k .
24. Table: x : 4, 8, 12; y : 2, 4, 6. Find k .
25. Table: x : 1, 3, 5; y : 0.5, 1.5, 2.5. Find k .
26. Table: x : 2, 4, 8; y : 6, 12, 24. Find k .
27. Table: x : 2, 5, 8; y : 4, 10, 16. Is this proportional? If yes, find k .
28. Table: x : 3, 6, 12; y : 9, 18, 36. Find k .
29. Table: x : 1, 2, 4; y : 1, 2, 4. Find k .
30. Table: x : 2, 4, 6; y : 3, 7, 10. Is this proportional? If yes, find k .
31. Table: x : 10, 20, 30; y : 25, 50, 75. Find k .



Math Worksheet for 7th Grade

Compare and interpret constants of proportionality

Name: _____

Due Date: _____

Teacher: _____

Parent Sign: _____

32. Table: $x: 0, 2, 4; y: 0, 6, 12$. Find k (use nonzero pairs).
33. Table: $x: 5, 10, 20; y: 10, 20, 40$. Find k .
34. Table: $x: 1, 4, 7; y: 3, 12, 21$. Find k .
35. Equation $y = kx$. Table: $x: 2, 4, 6; y: 5, 10, 15$. Find k .
36. Equation $y = kx$. Table: $x: 3, 6, 9; y: 6, 12, 18$. Find k .
37. Equation $y = kx$. Table: $x: 2, 5, ?; y: 8, 20, 40$. Find k and the missing x .
38. Equation $y = kx$. Table: $x: ?, 4, 6; y: 5, 10, 15$. Find k and the missing x .
39. Equation $y = kx$. Table: $x: 1, 2, 3; y: 2, ?, 6$. Find k and the missing y .
40. Equation $y = kx$. Table: $x: 2, 3, 5; y: 10, ?, 25$. Find k and the missing y .
41. Equation $y = kx$. Table: $x: 4, ?, 12; y: 8, 16, 24$. Find k and the missing x .
42. Equation $y = kx$. Table: $x: 5, 10, 15; y: ?, 20, 30$. Find k and the missing y .
43. Equation $x = ky$. Table: $y: 2, 4, 6; x: 6, 12, 18$. Find k .
44. Equation $x = ky$. Table: $y: 3, 6, 9; x: 9, ?, 27$. Find k and the missing x .
45. Two equations: A: $y = 2x$ and B: $y = 3x$. For $x = 4$, which gives a larger y ? (Also state both y values.)
46. Two tables:
Table A $x: 1, 2, 3; y: 2, 4, 6$
Table B $x: 1, 2, 3; y: 3, 6, 9$
Which table has the larger k ? Give both k values.
47. Equation $y = kx$. Table: $x: 2, 4; y: 1, 2$. Find k .
48. Equation $y = kx$. Table: $x: 3, 6; y: 0.9, 1.8$. Find k .
49. Equation $y = kx$. Table: $x: 0.5, 1, 1.5; y: 1, 2, 3$. Find k .
50. Equation $y = kx$. Table: $x: 8, 16; y: 24, 48$. Find k .