

Name: _____

Date: _____

Proportional Relationships

Grades 6 – 8 • 50 questions • Show your work

1. y is proportional to x . When $x = 9$, $y = 63$. Find the **constant of proportionality** k . _____
 2. y is proportional to x . When $x = 2$, $y = 8$. Find the **constant of proportionality** k . _____
 3. y is proportional to x . When $x = 4$, $y = 12$. Find the **constant of proportionality** k . _____
 4. y is proportional to x . When $x = 2$, $y = 14$. Find **y when $x = 4$** . _____
 5. y is proportional to x . When $x = 7$, $y = 21$. Find **y when $x = 2$** . _____
 6. y is proportional to x . When $x = 5$, $y = 40$. Find the **constant of proportionality** k . _____
 7. y is proportional to x . When $x = 6$, $y = 30$. Find the **constant of proportionality** k . _____
 8. y is proportional to x . When $x = 3$, $y = 15$. Find **y when $x = 2$** . _____
 9. y is proportional to x . When $x = 6$, $y = 48$. Find the **constant of proportionality** k . _____
 10. y is proportional to x . When $x = 3$, $y = 18$. Find **y when $x = 12$** . _____
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11. y is proportional to x . When $x = 3$, $y = 6$. Find the **constant of proportionality** k . _____
12. y is proportional to x . When $x = 6$, $y = 42$. Find the **constant of proportionality** k . _____
13. y is proportional to x . When $x = 3$, $y = 6$. Find **y when $x = 6$** . _____
14. y is proportional to x . When $x = 7$, $y = 42$. Find the **constant of proportionality** k . _____
15. y is proportional to x . When $x = 6$, $y = 36$. Find the **constant of proportionality** k . _____
16. y is proportional to x . When $x = 9$, $y = 27$. Find the **constant of proportionality** k . _____
17. y is proportional to x . When $x = 7$, $y = 14$. Find the **constant of proportionality** k . _____
18. y is proportional to x . When $x = 3$, $y = 18$. Find the **constant of proportionality** k . _____
19. y is proportional to x . When $x = 9$, $y = 81$. Find the **constant of proportionality** k . _____
20. y is proportional to x . When $x = 2$, $y = 14$. Find **y when $x = 3$** . _____
21. y is proportional to x . When $x = 6$, $y = 36$. Find **y when $x = 3$** . _____
22. y is proportional to x . When $x = 8$, $y = 16$. Find the **constant of proportionality** k . _____

- 23.** y is proportional to x . When $x = 9$, $y = 45$. Find y when $x = 2$. _____
- 24.** y is proportional to x . When $x = 4$, $y = 32$. Find the **constant of proportionality** k . _____
- 25.** y is proportional to x . When $x = 8$, $y = 72$. Find y when $x = 3$. _____
- 26.** y is proportional to x . When $x = 9$, $y = 18$. Find y when $x = 6$. _____
- 27.** y is proportional to x . When $x = 2$, $y = 4$. Find the **constant of proportionality** k . _____
- 28.** y is proportional to x . When $x = 6$, $y = 30$. Find y when $x = 4$. _____
- 29.** y is proportional to x . When $x = 3$, $y = 18$. Find y when $x = 6$. _____
- 30.** y is proportional to x . When $x = 4$, $y = 36$. Find y when $x = 3$. _____
- 31.** y is proportional to x . When $x = 8$, $y = 24$. Find the **constant of proportionality** k . _____
- 32.** y is proportional to x . When $x = 9$, $y = 18$. Find the **constant of proportionality** k . _____
- 33.** y is proportional to x . When $x = 6$, $y = 18$. Find the **constant of proportionality** k . _____
- 34.** y is proportional to x . When $x = 3$, $y = 21$. Find the **constant of proportionality** k . _____
- 35.** y is proportional to x . When $x = 3$, $y = 12$. Find y when $x = 5$. _____
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36. y is proportional to x . When $x = 2$, $y = 6$. Find y when $x = 3$. _____
37. y is proportional to x . When $x = 7$, $y = 63$. Find y when $x = 9$. _____
38. y is proportional to x . When $x = 2$, $y = 14$. Find the constant of proportionality k . _____
39. y is proportional to x . When $x = 5$, $y = 15$. Find the constant of proportionality k . _____
40. y is proportional to x . When $x = 9$, $y = 54$. Find y when $x = 7$. _____
41. y is proportional to x . When $x = 6$, $y = 48$. Find y when $x = 4$. _____
42. y is proportional to x . When $x = 5$, $y = 30$. Find y when $x = 2$. _____
43. y is proportional to x . When $x = 9$, $y = 54$. Find the constant of proportionality k . _____
44. y is proportional to x . When $x = 2$, $y = 10$. Find the constant of proportionality k . _____
45. y is proportional to x . When $x = 3$, $y = 27$. Find the constant of proportionality k . _____
46. y is proportional to x . When $x = 8$, $y = 48$. Find y when $x = 4$. _____
47. y is proportional to x . When $x = 8$, $y = 24$. Find y when $x = 11$. _____
48. y is proportional to x . When $x = 5$, $y = 25$. Find the constant of proportionality k . _____
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49. y is proportional to x . When $x = 4$, $y = 12$. Find **y when $x = 12$** . _____

50. y is proportional to x . When $x = 9$, $y = 18$. Find **y when $x = 11$** . _____

Answer Key — Proportional Relationships

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|--------|--------|--------|
| 1. 7 | 2. 4 | 3. 3 |
| 4. 28 | 5. 6 | 6. 8 |
| 7. 5 | 8. 10 | 9. 8 |
| 10. 72 | 11. 2 | 12. 7 |
| 13. 12 | 14. 6 | 15. 6 |
| 16. 3 | 17. 2 | 18. 6 |
| 19. 9 | 20. 21 | 21. 18 |
| 22. 2 | 23. 10 | 24. 8 |
| 25. 27 | 26. 12 | 27. 2 |
| 28. 20 | 29. 36 | 30. 27 |
| 31. 3 | 32. 2 | 33. 3 |
| 34. 7 | 35. 20 | 36. 9 |
| 37. 81 | 38. 7 | 39. 3 |
| 40. 42 | 41. 32 | 42. 12 |
| 43. 6 | 44. 5 | 45. 9 |
| 46. 24 | 47. 33 | 48. 5 |
| 49. 36 | 50. 22 | |
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