

Name: _____

Due Date: _____

Teacher: _____

Parent Sign: _____

Answers

1. $k = 5$

2. $k = \frac{1}{2}$

3. $k = 0.25$

4. $7y = 21x \rightarrow y = 3x$, so $k = 3$

5. $y = 3x \rightarrow k = 3$

6. $k = \frac{4}{3}$

7. $k = -2$

8. $k = 12$

9. $2y = 8x \rightarrow y = 4x$, so $k = 4$

10. $k = 7.5$

11. $y = 3x$ has larger k ($3 > 2$)

12. $y = 1.2x$ has larger k ($1.2 > 0.8$)

13. $k = \frac{y}{x} = \frac{50}{10} = 5$

14. $k = \frac{6}{4} = \frac{3}{2} = 1.5$

15. $k = \frac{9}{3} = 3$

16. $k = \frac{y}{x} = \frac{20}{5} = 4$

17. $k = \frac{3}{5} = 0.6$

18. Yes; $k = 4$

19. Yes; $k = 3$

20. Not proportional

21. $k = \frac{9}{3} = 3$

22. $k = \frac{15}{5} = 3$

23. $k = \frac{5}{2} = 2.5$ (or 2.5)

24. $k = \frac{2}{4} = 0.5$

25. $k = 0. \frac{5}{1} = 0.5$

26. $k = \frac{6}{2} = 3$

27. Yes; $k = \frac{4}{2} = 2$ (check: $2 \rightarrow 4$, $5 \rightarrow 10$, $8 \rightarrow 16$)

28. $k = \frac{9}{3} = 3$

29. $k = \frac{1}{1} = 1$

30. Not proportional

31. $k = \frac{25}{10} = 2.5$



Math Worksheet for 7th Grade

Compare and interpret constants of proportionality

Name: _____

Due Date: _____

Teacher: _____

Parent Sign: _____

32. Use nonzero pairs (2,6): $k = \frac{6}{2} = 3$

33. $k = \frac{10}{5} = 2$

34. $k = \frac{3}{1} = 3$

35. $k = \frac{5}{2} = 2.5$

36. $k = \frac{6}{3} = 2$

37. From pairs 2→8 gives $k = 4$. Missing x when $y = 40$: $x = \frac{y}{k} = \frac{40}{4} = 10$

38. From known pairs 4→10: $k = \frac{10}{4} = 2.5$. Missing x when $y = 5$: $x = \frac{5}{2.5} = 2$

39. From 1→2: $k = 2$. Missing y for $x = 2 \rightarrow y = 2 \cdot 2 = 4$

40. From 2→10: $k = \frac{10}{2} = 5$. Missing y for $x = 3 \rightarrow y = 5 \cdot 3 = 15$

41. From 4→8: $k = \frac{8}{4} = 2$. Missing x when $y = 16$: $x = \frac{16}{2} = 8$

42. From 10→20: $k = \frac{20}{10} = 2$. Missing y for $x = 5 \rightarrow y = 2 \cdot 5 = 10$

43. $x = k y$; using $y=2$, $x=6$ gives $k = \frac{6}{2} = 3$

44. From $y=3$, $x=9$ gives $k = \frac{9}{3} = 3$. Missing x when $y=6$: $x = 3 \cdot 6 = 18$

45. For $x = 4$: A: $y = 2 \cdot 4 = 8$. B: $y = 3 \cdot 4 = 12$. B gives larger y ($12 > 8$).

46. Table A $k = 2$. Table B $k = 3$. Table B has larger k ($3 > 2$).

47. $k = \frac{1}{2} = 0.5$

48. $k = 0 \cdot \frac{9}{3} = 0.3$

49. $k = \frac{1}{0.5} = 2$ (check: $0.5 \rightarrow 1$, $1 \rightarrow 2$, $1.5 \rightarrow 3$)

50. $k = \frac{24}{8} = 3$