

Grade 8 Ratios & Proportions Mixed Review

Ratios & Proportions • Grade 8 • Mixed Review • Set A • CCSS 8.EE.5

Name: _____

Date: _____

Solve each problem. Read carefully — the problems change shape as you go.

1. \$56.00 for 7 items = \$___ per item

2. If y is proportional to x and $y = 27$ when $x = 9$, what is y when $x = 12$?

3. Solve: $4/2 = x/10$

4. Two similar triangles have corresponding sides 7 and 28. If another side of the small triangle is 3, what is the matching side of the large triangle?

5. A rectangle 2 cm by 9 cm is enlarged by a scale factor of 4. What are the new dimensions?

6. \$80.00 for 5 items = \$___ per item

7. If y is proportional to x and $y = 49$ when $x = 7$, what is y when $x = 10$?

8. Solve: $\frac{1}{11} = \frac{x}{88}$

9. Two similar triangles have corresponding sides 5 and 15. If another side of the small triangle is 3, what is the matching side of the large triangle?

10. On a map, 2 cm represents 6 km. What distance does 3 cm represent?

11. \$418.00 for 11 items = \$___ per item

12. $y = kx$ and $y = 63$ when $x = 7$. Find k .

13. Solve: $\frac{x}{6} = \frac{81}{54}$

14. Two similar triangles have corresponding sides 5 and 20. If another side of the small triangle is 6, what is the matching side of the large triangle?

15. On a map, 5 cm represents 20 km. What distance does 7 cm represent?

16. 216 miles in 6 hours = ____ miles per hour

17. If y is proportional to x and $y = 12$ when $x = 3$, what is y when $x = 6$?

18. Solve: $2/2 = 8/x$

19. Two similar triangles have corresponding sides 4 and 20. If another side of the small triangle is 12, what is the matching side of the large triangle?

20. On a map, 4 cm represents 8 km. What distance does 8 cm represent?

21. 228 pages in 6 days = ____ pages per day

22. If y is proportional to x and $y = 15$ when $x = 3$, what is y when $x = 6$?

23. Solve: $6/3 = x/21$

24. Two similar triangles have corresponding sides 3 and 15. If another side of the small triangle is 7, what is the matching side of the large triangle?

25. A rectangle 10 cm by 9 cm is enlarged by a scale factor of 7. What are the new dimensions?

26. 42 miles in 7 hours = ____ miles per hour

27. If y is proportional to x and $y = 70$ when $x = 7$, what is y when $x = 10$?

28. Solve: $\frac{4}{3} = \frac{x}{27}$

29. Two similar triangles have corresponding sides 10 and 20. If another side of the small triangle is 8, what is the matching side of the large triangle?

30. On a map, 12 cm represents 96 km. What distance does 9 cm represent?

Answer Key

Grade 8 Ratios & Proportions Mixed Review — Set A

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|------------------|--------------|--------------------|
| 1. 8.00 | 11. 38.00 | 21. 38 |
| 2. $y = 36$ | 12. $k = 9$ | 22. $y = 30$ |
| 3. $x = 20$ | 13. $x = 9$ | 23. $x = 42$ |
| 4. 12 | 14. 24 | 24. 35 |
| 5. 8 cm by 36 cm | 15. 28 km | 25. 70 cm by 63 cm |
| 6. 16.00 | 16. 36 | 26. 6 |
| 7. $y = 70$ | 17. $y = 24$ | 27. $y = 100$ |
| 8. $x = 8$ | 18. $x = 8$ | 28. $x = 36$ |
| 9. 9 | 19. 60 | 29. 16 |
| 10. 9 km | 20. 16 km | 30. 72 km |