

Proportional Ratios

 **Fill in the blanks; solve each proportion.**

1) $3 : 7 = \underline{\hspace{1cm}} : 49$

7) $10 : 1 = \underline{\hspace{1cm}} : 10$

2) $1 : 2 = 20 : \underline{\hspace{1cm}}$

8) $1 : 3 = \underline{\hspace{1cm}} : 27$

3) $1 : 5 = \underline{\hspace{1cm}} : 50$

9) $8 : 1 = \underline{\hspace{1cm}} : 8$

4) $7 : 9 = 14 : \underline{\hspace{1cm}}$

10) $9 : 2 = \underline{\hspace{1cm}} : 14$

5) $5 : 3 = 45 : \underline{\hspace{1cm}}$

11) $3 : 12 = 12 : \underline{\hspace{1cm}}$

6) $7 : 3 = \underline{\hspace{1cm}} : 18$

12) $6 : 4 = 24 : \underline{\hspace{1cm}}$

 **State if each pair of ratios form a proportion.**

13) $\frac{3}{10}$ and $\frac{9}{30}$

17) $\frac{2}{5}$ and $\frac{16}{45}$

21) $\frac{6}{17}$ and $\frac{36}{85}$

14) $\frac{1}{2}$ and $\frac{16}{32}$

18) $\frac{4}{9}$ and $\frac{40}{81}$

22) $\frac{2}{7}$ and $\frac{24}{86}$

15) $\frac{5}{6}$ and $\frac{35}{42}$

19) $\frac{6}{11}$ and $\frac{42}{77}$

23) $\frac{12}{19}$ and $\frac{156}{247}$

16) $\frac{3}{7}$ and $\frac{27}{72}$

20) $\frac{1}{6}$ and $\frac{8}{48}$

24) $\frac{13}{21}$ and $\frac{182}{294}$

 **Solve each proportion.**

25) $\frac{2}{5} = \frac{14}{x}, x = \underline{\hspace{1cm}}$

29) $\frac{3}{7} = \frac{x}{63}, x = \underline{\hspace{1cm}}$

33) $\frac{4}{7} = \frac{x}{77}, x = \underline{\hspace{1cm}}$

26) $\frac{1}{6} = \frac{7}{x}, x = \underline{\hspace{1cm}}$

30) $\frac{1}{4} = \frac{13}{x}, x = \underline{\hspace{1cm}}$

34) $\frac{5}{13} = \frac{x}{143}, x = \underline{\hspace{1cm}}$

27) $\frac{3}{5} = \frac{27}{x}, x = \underline{\hspace{1cm}}$

31) $\frac{7}{9} = \frac{56}{x}, x = \underline{\hspace{1cm}}$

35) $\frac{7}{19} = \frac{x}{209}, x = \underline{\hspace{1cm}}$

28) $\frac{1}{5} = \frac{x}{80}, x = \underline{\hspace{1cm}}$

32) $\frac{6}{11} = \frac{42}{x}, x = \underline{\hspace{1cm}}$

36) $\frac{3}{13} = \frac{x}{195}, x = \underline{\hspace{1cm}}$



Answers

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|--------|---------|--------|
| 1) 21 | 13) Yes | 25) 35 |
| 2) 40 | 14) Yes | 26) 42 |
| 3) 10 | 15) Yes | 27) 45 |
| 4) 18 | 16) No | 28) 16 |
| 5) 27 | 17) No | 29) 27 |
| 6) 42 | 18) No | 30) 52 |
| 7) 100 | 19) Yes | 31) 72 |
| 8) 9 | 20) Yes | 32) 77 |
| 9) 64 | 21) No | 33) 44 |
| 10) 63 | 22) No | 34) 55 |
| 11) 48 | 23) Yes | 35) 77 |
| 12) 16 | 24) Yes | 36) 45 |