

## Introduction to Ratios & Proportions

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

1)  $\frac{3}{4}$  and  $\frac{18}{16}$

2)  $\frac{3}{2}$  and  $\frac{9}{10}$

3)  $\frac{12}{8}$  and  $\frac{3}{4}$

4)  $\frac{3}{4}$  and  $\frac{12}{16}$

5)  $\frac{16}{6}$  and  $\frac{4}{3}$

6)  $\frac{3}{4}$  and  $\frac{12}{24}$

7)  $\frac{3}{4}$  and  $\frac{9}{8}$

8)  $\frac{4}{2}$  and  $\frac{16}{12}$

9)  $\frac{6}{4}$  and  $\frac{3}{2}$

10)  $\frac{6}{8}$  and  $\frac{2}{4}$

11)  $\frac{4}{2}$  and  $\frac{16}{8}$

12)  $\frac{3}{4}$  and  $\frac{15}{12}$

13)  $\frac{8}{16}$  and  $\frac{2}{4}$

14)  $\frac{2}{3}$  and  $\frac{4}{12}$

15)  $\frac{2}{3}$  and  $\frac{6}{9}$

16)  $\frac{4}{2}$  and  $\frac{8}{4}$

17)  $\frac{16}{12}$  and  $\frac{4}{3}$

18)  $\frac{6}{8}$  and  $\frac{3}{2}$

19)  $\frac{9}{12}$  and  $\frac{3}{4}$

20)  $\frac{4}{2}$  and  $\frac{16}{10}$

**Solve each proportion.**

$$21) \frac{4}{8} = \frac{12}{m}$$

$$22) \frac{10}{9} = \frac{n}{12}$$

$$23) \frac{7}{10} = \frac{3}{3x}$$

$$24) \frac{4}{r} = \frac{3}{8}$$

$$25) \frac{6}{5v} = \frac{11}{9}$$

$$26) \frac{4}{3} = \frac{2}{p}$$

$$27) \frac{11}{4} = \frac{8}{x}$$

$$28) \frac{x}{11} = \frac{8}{9}$$

$$29) \frac{n}{4} = \frac{2}{12}$$

$$30) \frac{10}{b} = \frac{2}{4}$$

$$31) \frac{2}{9} = -\frac{5}{p}$$

$$32) \frac{x}{10} = \frac{6}{3}$$

$$33) \frac{8}{6} = \frac{5}{x}$$

$$34) \frac{4}{x} = \frac{2}{9}$$

$$35) -\frac{7}{4} = -\frac{m}{2}$$

$$36) \frac{9}{a} = \frac{2}{11}$$

$$37) \frac{n}{9} = -\frac{6}{4}$$

$$38) \frac{2}{3} = -\frac{n}{12}$$

$$39) -\frac{k}{9} = \frac{6}{3}$$

$$40) \frac{11}{r} = -\frac{8}{10}$$

## Answers to Introduction to Ratios & Proportions (ID: 1)

- |                                    |                                   |                                    |                                    |
|------------------------------------|-----------------------------------|------------------------------------|------------------------------------|
| 1) No                              | 2) No                             | 3) No                              | 4) Yes                             |
| 5) No                              | 6) No                             | 7) No                              | 8) No                              |
| 9) Yes                             | 10) No                            | 11) Yes                            | 12) No                             |
| 13) Yes                            | 14) No                            | 15) Yes                            | 16) Yes                            |
| 17) Yes                            | 18) No                            | 19) Yes                            | 20) No                             |
| 21) {24}                           | 22) $\left\{\frac{40}{3}\right\}$ | 23) $\left\{\frac{10}{7}\right\}$  | 24) $\left\{\frac{32}{3}\right\}$  |
| 25) $\left\{\frac{54}{55}\right\}$ | 26) $\left\{\frac{3}{2}\right\}$  | 27) $\left\{\frac{32}{11}\right\}$ | 28) $\left\{\frac{88}{9}\right\}$  |
| 29) $\left\{\frac{2}{3}\right\}$   | 30) {20}                          | 31) $\left\{-\frac{45}{2}\right\}$ | 32) {20}                           |
| 33) $\left\{\frac{15}{4}\right\}$  | 34) {18}                          | 35) $\left\{\frac{7}{2}\right\}$   | 36) $\left\{\frac{99}{2}\right\}$  |
| 37) $\left\{-\frac{27}{2}\right\}$ | 38) {-8}                          | 39) {-18}                          | 40) $\left\{-\frac{55}{4}\right\}$ |