

Equivalent Fractions

- Equivalent fractions can be created by multiplying/dividing the numerator and denominator by the same number.

Examples:

$$\begin{aligned} & \frac{1}{2} \\ &= \frac{1 \times 3}{2 \times 3} \leftarrow \text{Multiply by 3} \\ &= \frac{3}{6} \leftarrow \frac{1}{2} = \frac{3}{6} \end{aligned}$$

$$\begin{aligned} & \frac{3}{7} \\ &= \frac{3 \times 5}{7 \times 5} \leftarrow \text{Multiply by 5} \\ &= \frac{15}{35} \leftarrow \frac{3}{7} = \frac{15}{35} \end{aligned}$$

Practice: Fill in the blank

a) $\frac{1}{2} = \frac{\quad}{12}$

b) $\frac{2}{3} = \frac{\quad}{24}$

c) $\frac{4}{9} = \frac{16}{\quad}$

d) $\frac{3}{5} = \frac{\quad}{60}$

e) $\frac{1}{4} = \frac{7}{\quad}$

f) $\frac{5}{6} = \frac{\quad}{42}$

g) $\frac{7}{8} = \frac{49}{\quad}$

h) $\frac{2}{9} = \frac{\quad}{108}$

i) $\frac{7}{15} = \frac{\quad}{135}$

j) $\frac{1}{5} = \frac{\quad}{245}$

Answers:

a) $\frac{1 \times 6}{2 \times 6} = \frac{6}{12}$

b) $\frac{2 \times 8}{3 \times 8} = \frac{16}{24}$

c) $\frac{4 \times 4}{9 \times 4} = \frac{16}{36}$

d) $\frac{3 \times 12}{5 \times 12} = \frac{36}{60}$

e) $\frac{1 \times 7}{4 \times 7} = \frac{7}{28}$

f) $\frac{5 \times 7}{6 \times 7} = \frac{35}{42}$

g) $\frac{7 \times 7}{8 \times 7} = \frac{49}{56}$

h) $\frac{2 \times 12}{9 \times 12} = \frac{24}{108}$

i) $\frac{7 \times 9}{15 \times 9} = \frac{63}{135}$

j) $\frac{1 \times 49}{5 \times 49} = \frac{49}{245}$