

Multiplying on Fractions

There are 3 simple steps to multiply fractions:

- Multiply the top numbers (the *numerators*).
- Multiply the bottom numbers (the *denominators*).
- Simplify the fraction if needed.

Example

$$\frac{1}{2} \times \frac{2}{5}$$

Multiply the top numbers:

$$\frac{1}{2} \times \frac{2}{5} = \frac{1 \times 2}{2 \times 5} = \frac{2}{10}$$

Multiply the bottom numbers:

$$\frac{1}{2} \times \frac{2}{5} = \frac{1 \times 2}{2 \times 5} = \frac{2}{10}$$

Simplify the fraction:

$$\frac{2}{10} = \frac{1}{5}$$

Example

$$\frac{1}{3} \times \frac{9}{16}$$

Multiply the top numbers:

$$\frac{1}{3} \times \frac{9}{16} = \frac{1 \times 9}{3 \times 16} = \frac{9}{48}$$

Multiply the bottom numbers:

$$\frac{1}{3} \times \frac{9}{16} = \frac{1 \times 9}{3 \times 16} = \frac{9}{48}$$

Simplify the fraction

$$\frac{9}{48} = \frac{3}{16}$$

(This time we simplified by dividing both top and bottom by 3)