

# Multiplying Fractions

numerator x numerator  
denominator x denominator

ex. 1  $\frac{2}{3} \times \frac{3}{4}$

$$\frac{2}{3} \times \frac{3}{4} = \frac{6}{12}$$

$$\frac{6}{12} \div \frac{6}{6} = \boxed{\frac{1}{2}}$$

① multiply straight across

② simplify

ex. 2  $\frac{5}{4} \times \frac{6}{5}$

$$\frac{5}{4} \times \frac{6}{5} = \frac{30}{20}$$

$$\frac{30}{20} \div \frac{10}{10} = \frac{3}{2}$$

① multiply straight across

② simplify

$$\frac{3}{2} \quad \begin{array}{r} 1 \\ 2 \overline{) 3} \\ \underline{-2} \\ 1 \end{array} \quad 1\frac{1}{2}$$

③ change improper fraction to mixed # by dividing

$$\boxed{1\frac{1}{2}}$$

④ simplify

ex. 3

$$\frac{2}{3} \times 6$$

$$\frac{2}{3} \times \frac{6}{1}$$

$$\frac{2}{3} \times \frac{6}{1} = \frac{12}{3}$$

$$\frac{12}{3} = \frac{3}{3} = \frac{4}{1}$$

$$1 \overline{) 4}$$

$$\boxed{4}$$

① change whole # to improper fraction by adding a 1 underneath

② Multiply straight across

③ Simplify

④ change improper fraction to mixed # by dividing