



# Multiplying Fractions

## Multiplying an integer by a fraction

To **multiply** an **integer** (whole number) by a **fraction**, we think about multiplication as “(lots) of” and **find a fraction of an amount**.

 **Example** Work out  $\frac{3}{4} \times 24$  This means  $\frac{3}{4}$  of 24

$24 \div 4 = 6$   **1** Find  $\frac{1}{4}$  (divide by denominator)

$6 \times 3 = 18$   **2** Find 3 lots of  $\frac{1}{4}$  (multiply by numerator)

$$\frac{3}{4} \times 24 = 18$$

## Multiplying a fraction by a fraction

To **multiply two (or more) fractions**, we multiply the **numerators** together and multiply the **denominators** together.

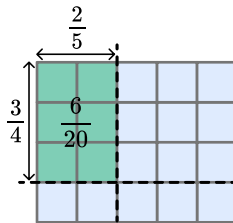
 **Example** Work out  $\frac{2}{5} \times \frac{3}{4}$

$\frac{2}{5} \times \frac{3}{4} = \frac{2 \times 3}{5 \times 4} = \frac{6}{20} \xrightarrow[\div 2]{\div 2} \frac{3}{10}$

Multiply the numerators together.

Multiply the denominators together.

Simplify if possible.



Visually:  
 $\frac{2}{5}$  of  $\frac{3}{4} = \frac{6}{20}$