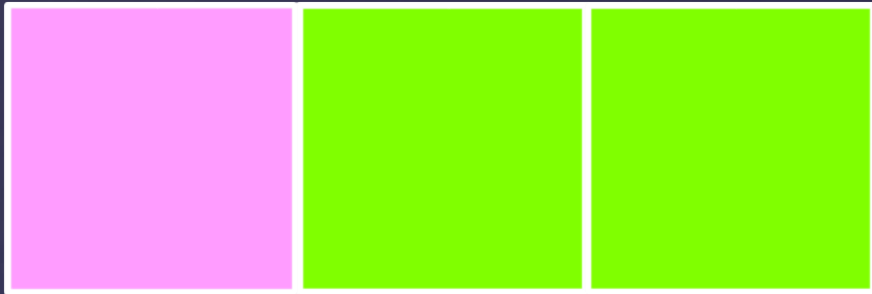# Multiplying fractions

{ **I can multiply a fraction by a whole number, using diagrams**
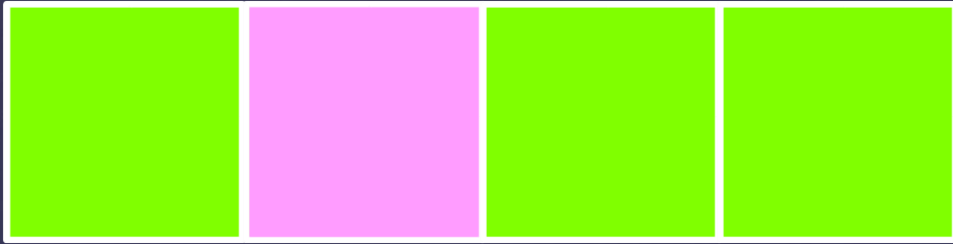
$$\frac{1}{3} + \frac{1}{3} = \frac{2}{3}$$

or

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

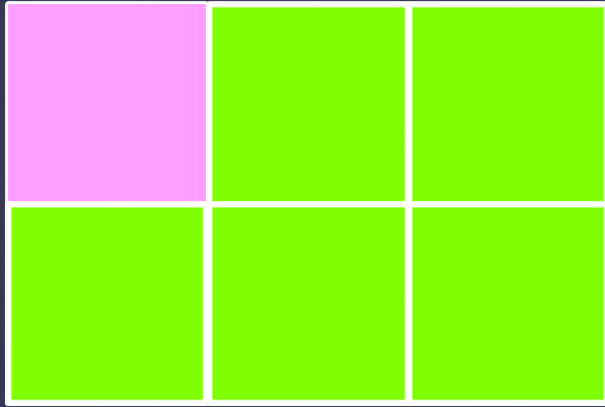# What fraction of the shape is green?

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

or

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

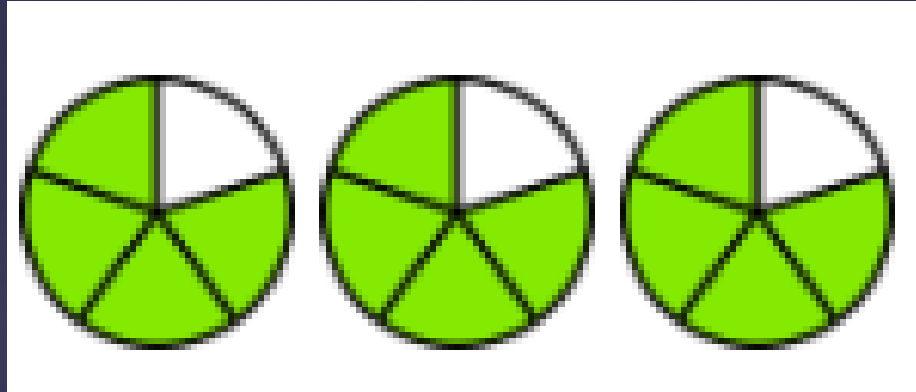What fraction of the shape is green?

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

What fraction of the shape is green?
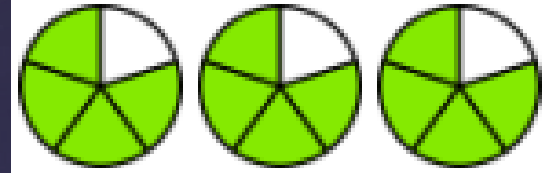
$$\frac{2}{6} = \frac{1}{3}$$ Here we find the simplest fraction by dividing the numerator (top number) and the denominator (bottom number) by the same number (2).

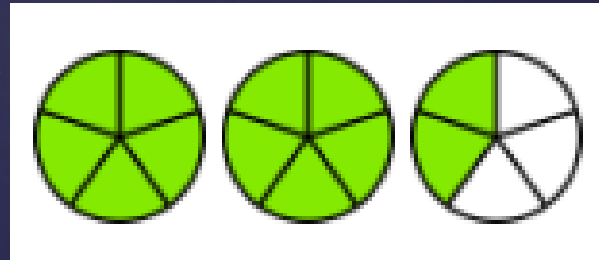$3 \times \dfrac{4}{5}$ is three lots of $\dfrac{4}{5}$

$3 \times \dfrac{4}{5} = \dfrac{12}{5}$

Now we turn $\frac{12}{5}$

into a mixed number (whole number and a fraction).

$$\frac{12}{5} = 2\frac{2}{5}$$

What do you do to multiply a fraction by a whole number?

- Multiply the fraction's numerator by the whole number

- Simplify, if necessary

- Convert to a mixed number, if necessary