Proportions
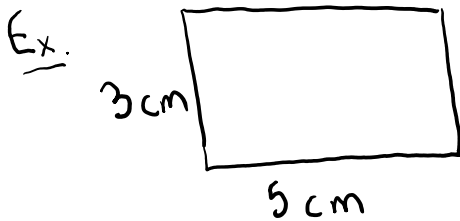- A part, a share or number compared to another part or a whole

Proportional
says that two fractions or ratios are equal

Ex.

3cm

5 cm

The proportions are 3:5

or $\frac{3}{5}$

1.5cm

2.5 cm

You could say these rectangles are proportional because

$$\frac{1.5}{2.5} = \frac{3}{5}$$

When talking about proportional shapes / objects we need to understand ==equivalent fractions==

Ex. $\frac{2}{7} \xrightarrow{\times 3} = \frac{x}{21}$ ⤹×3⤸ $x = 6$

Ex. $\frac{\div 4}{13} = \frac{11}{m}$ $\frac{13 \times 11}{4} = 35.75$

$\boxed{m = 35.75}$

Ex. $\dfrac{6}{15} \xrightarrow{\times} \dfrac{b}{7}$ $\dfrac{6 \times 7}{15} = 2.8$ $\boxed{b = 2.8}$

Ex. $\dfrac{307}{y} = \dfrac{2.1}{75}$ $\dfrac{307 \times 75}{2.1} = 10\,964.3$

$\boxed{y = 10\,964.3}$