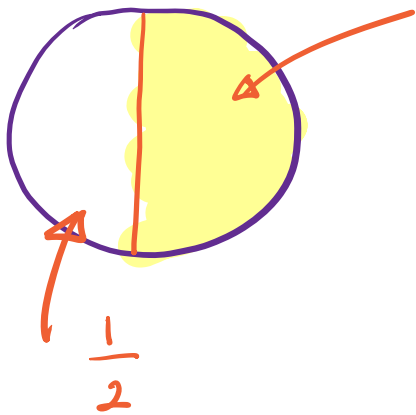


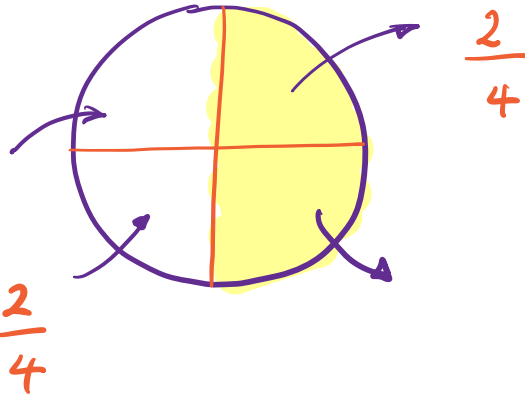
Learning Objectives:

Understand what equivalent fractions are

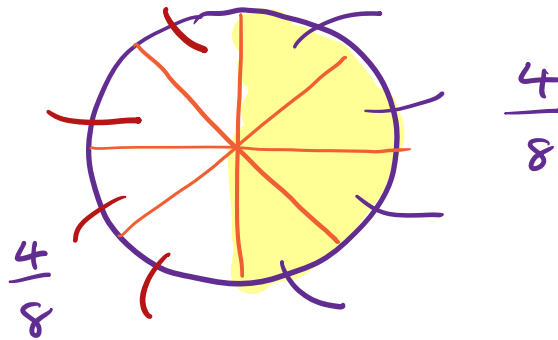
Be able to simplify fractions



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



$$\frac{2}{4}$$



$$\frac{4}{8}$$

Equivalent Fractions

$$\frac{1}{2} = \frac{2}{4} = \frac{4}{8}$$

even

$$\frac{8}{16}$$

$$\div 2$$

$$= \frac{4}{8}$$

$$\div 2$$

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

even

Top !
Bottom

$$\frac{4}{8} \xrightarrow{\div 2} \frac{2}{4} \xrightarrow{\div 2} \frac{1}{2}$$

$$\frac{8}{16} \div 4 = \frac{2}{4} \div 2 = \frac{1}{2}$$

$$\frac{8}{16} \div 8 = \frac{1}{2}$$

The other way?

$$\frac{1}{3} \begin{matrix} \times 2 \\ \times 2 \end{matrix} = \frac{2}{6} \begin{matrix} \times 2 \\ \times 2 \end{matrix} = \frac{4}{12} = \frac{8}{24}$$

$$\frac{3}{4} \begin{matrix} \times 10 \\ \times 10 \end{matrix} = \frac{30}{40}$$

eg. $\frac{3}{5} \begin{matrix} \xrightarrow{\times 8} 24 \\ \xleftarrow{\times 8} 40 \end{matrix} = \frac{24}{40}$

Numerator
Denominator

eg. $\frac{1}{2} \begin{matrix} \xrightarrow{\times 20} 20 \\ \xleftarrow{\times 20} 40 \end{matrix} = \frac{20}{40}$

eg. $\frac{7}{4} \begin{matrix} \xrightarrow{\times 10} 70 \\ \xleftarrow{\times 10} 40 \end{matrix} = \frac{70}{40}$

eg. $36 \xrightarrow{\div 3} 12$

$$\frac{120}{40}$$

$$\div 3$$

eg

$$\frac{8}{20} = \frac{4}{10} = \frac{2}{5}$$

$\div 2$ (from 8 to 4)
 $\div 2$ (from 20 to 10)
 $\div 2$ (from 4 to 2)
 $\div 2$ (from 10 to 5)

eg

$$\frac{25}{15} = \frac{5}{3}$$

$\div 5$ (from 25 to 5)
 $\div 5$ (from 15 to 3)