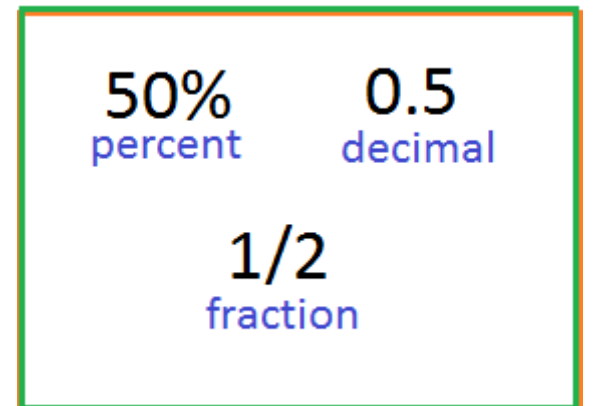


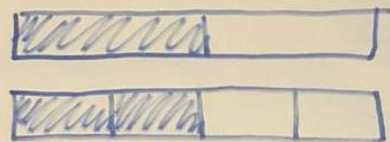


# Maths

Pictures of flipchart explanations linked to Oak Class YouTube Channel.



## Equivalent Fractions



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

## Calculating equivalent fractions

$$\frac{3}{4} \xrightarrow{\times 3} \frac{9}{12}$$

To simplify you divide.

$$\frac{10}{25} \xrightarrow{\div 5} \frac{2}{5}$$

## Adding and subtracting

$$\frac{4}{9} + \frac{2}{9} = \frac{6}{9}$$
$$\frac{4 + 2}{9}$$

## Different denominators

$$\frac{3}{4} + \frac{3}{10} = \frac{21}{20}$$
$$\frac{3}{4} \xrightarrow{\times 5} \frac{15}{20} + \frac{3}{10} \xrightarrow{\times 2} \frac{6}{20}$$

$$\frac{8}{10} - \frac{2}{10} = \frac{6}{10}$$

$$\frac{8-2}{10}$$

Different denominators

$$\frac{7}{8} - \frac{5}{12} = \frac{11}{24}$$

Diagram illustrating the process of finding a common denominator for  $\frac{7}{8}$  and  $\frac{5}{12}$ :

- $\frac{7}{8}$  is multiplied by 3 (indicated by  $\times 3$  and a bracket) to get  $\frac{21}{24}$ .
- $\frac{5}{12}$  is multiplied by 2 (indicated by  $\times 2$  and a bracket) to get  $\frac{10}{24}$ .
- The final result is  $\frac{21}{24} - \frac{10}{24} = \frac{11}{24}$ .

Ordering

Diagram illustrating the process of ordering fractions with different denominators:

- Fractions shown:  $\frac{3}{10}$ ,  $1\frac{4}{20}$ ,  $\frac{13}{20}$ ,  $\frac{4}{5}$ ,  $\frac{16}{20}$ .
- Conversion factors are shown below the fractions:  $\times 2$  for  $\frac{3}{10}$ ,  $\times 4$  for  $\frac{4}{5}$ , and  $\times 2$  for  $\frac{13}{20}$ .
- The fractions are converted to a common denominator of 20:  $\frac{6}{20}$ ,  $1\frac{4}{20}$ ,  $\frac{13}{20}$ ,  $\frac{16}{20}$ , and  $\frac{16}{20}$ .
- The fractions are then ordered:  $\frac{3}{10}$ ,  $\frac{6}{20}$ ,  $\frac{4}{5}$ ,  $\frac{13}{20}$ , and  $\frac{16}{20}$ .
- Red annotations show the conversion of  $\frac{4}{5}$  to  $\frac{16}{20}$  and  $\frac{13}{20}$  to  $\frac{16}{20}$  using  $\times 4$  and  $\times 2$  respectively.

# Improper (Mrs Steels)

$$\frac{63}{2} = 31\frac{1}{2}$$

$$\frac{72}{3} = 24$$

$$\frac{233}{7} = 33\frac{2}{7}$$

$$1 \begin{array}{|c|c|} \hline 1 & 2 \\ \hline \end{array}$$

$$\begin{array}{|c|c|c|} \hline 1 & 2 & 3 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ 14 \\ 21 \\ \hline 28 \end{array}$$

$$2 \begin{array}{|c|c|} \hline 3 & 4 \\ \hline \end{array}$$

$$\begin{array}{|c|c|c|} \hline 4 & 5 & 6 \\ \hline \end{array}$$

$$3 \begin{array}{|c|c|} \hline 5 & 6 \\ \hline \end{array}$$

$$\begin{array}{|c|c|c|} \hline 7 & & \\ \hline \end{array}$$

## Mixed

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



## Dividing

$$\frac{3}{5} \div 4$$

$$\frac{3}{5} \div \frac{4}{1} = \frac{3}{5} \times \frac{1}{4} = \frac{3}{20}$$



$$\frac{12}{8} = \left| \frac{4}{8} \right| = \left| \frac{2}{4} \right|$$

$$= \left| \frac{1}{2} \right|$$

$$11\frac{5}{7} = \frac{82}{7}$$

$$11 \times 7 = 77 + 5 =$$

Multiplying

$$\frac{3}{8} \times \frac{7}{10} = \frac{21}{80}$$

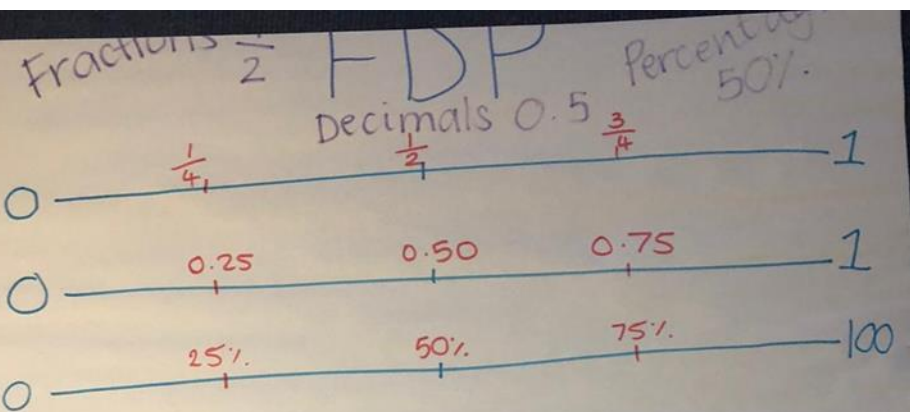
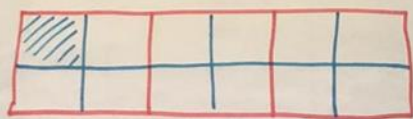
$$\frac{3}{8} \times \frac{4}{1} = \frac{12}{8}$$

Dividing  
Keep Flip Change

Not the chicken!

$$\frac{3}{5} \div \frac{1}{4} = \frac{3}{5} \times \frac{4}{1} = \frac{12}{5}$$

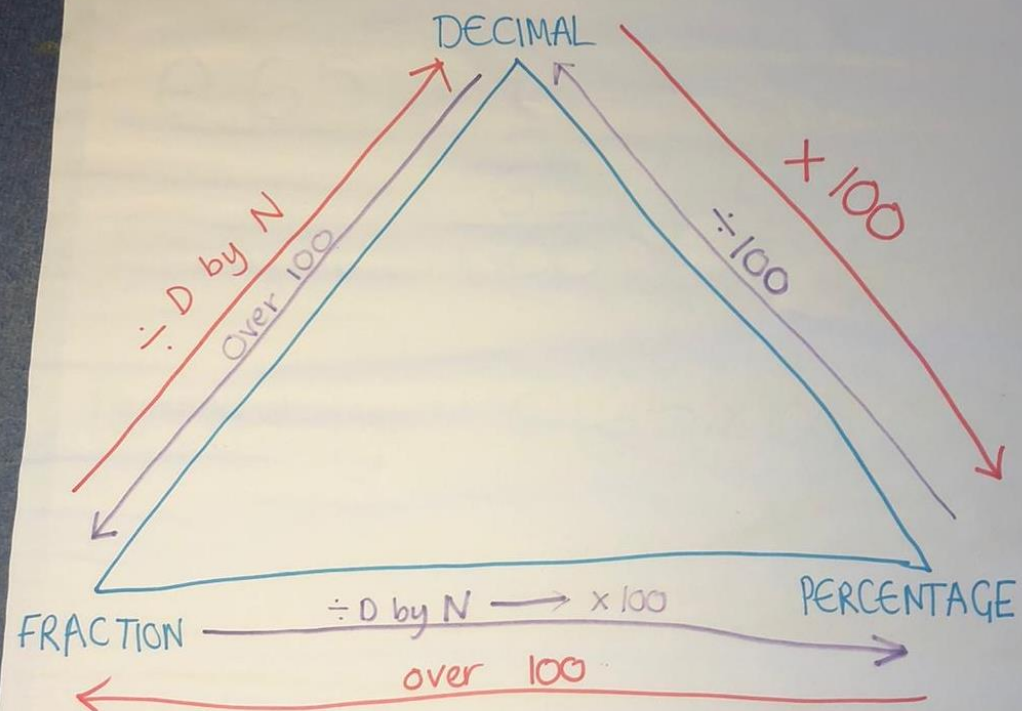
$$\frac{1}{3} \div 4 = \frac{1}{3} \times \frac{1}{4} = \frac{1}{12}$$



The ones you should know without working it out!

(F) $\frac{1}{8}$	0.10 (D)	10% (P)
$\frac{1}{4}$	0.25	25%
$\frac{1}{2}$	0.50	50%
$\frac{3}{4}$	0.75	75%
$\frac{1}{5}$	0.20	20%
$\frac{1}{10}$	0.10	10%
	0.125	12.5%

# Converting



# Percentage

35%.

Decimal:  $35 \div 100$ .

0.35

Fraction:

$$\frac{35}{100} = \frac{7}{20}$$

T | U | . | T | H  
3 | 5 | 3 | 5  
0 | 3 | 5

$\frac{1}{4}$     0.35    10%.

---

0.25    0.35    0.10  
25%    35%    10%

0.10    0.25    0.35



$\frac{1}{5}$  Fraction

Decimal :  $5 \overline{) 0.2}$

Percentage  $0.2 \times 100 = 20\%$

$0.20$