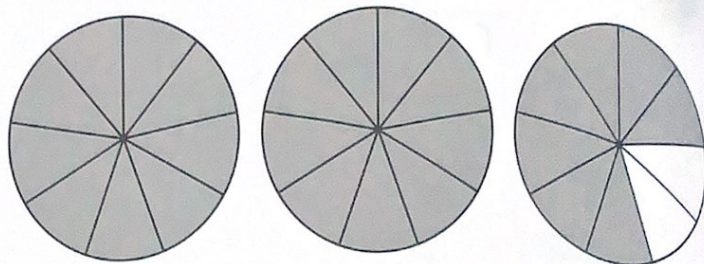


Subtracting fractions I

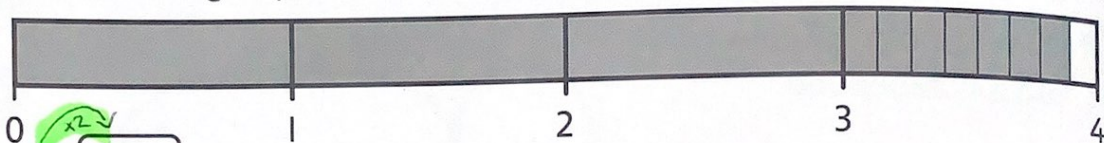
- 1 Work out $2\frac{7}{9} - \frac{5}{9}$.

$$\frac{7}{9} - \frac{5}{9} = \frac{\boxed{2}}{\boxed{9}}$$

$$\text{So, } 2\frac{7}{9} - \frac{5}{9} = \boxed{2} \frac{\boxed{2}}{\boxed{9}}$$



- 2 a) Work out $3\frac{7}{8} - \frac{1}{4}$.



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

$$3\frac{7}{8} - \frac{1}{4} = 3\frac{7}{8} - \frac{\boxed{2}}{\boxed{8}}$$

$$= 3 \frac{\boxed{5}}{\boxed{8}}$$

- b) Work out $3\frac{7}{8} - \frac{1}{2}$.

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

$$3\frac{7}{8} - \frac{1}{2} = 3\frac{7}{8} - \frac{\boxed{4}}{\boxed{8}}$$

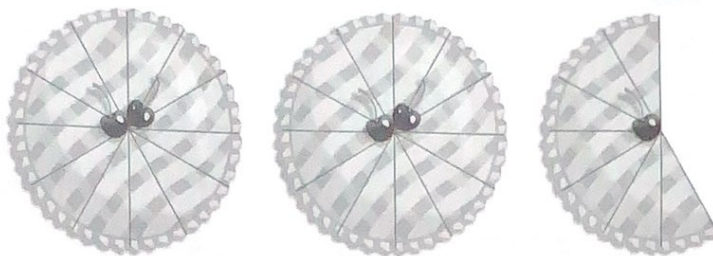
$$= 3 \frac{\boxed{3}}{\boxed{8}}$$

- c) Work out:

$$3\frac{7}{8} - 1 = \boxed{2} \frac{\boxed{7}}{\boxed{8}}$$

$$3\frac{7}{8} - \frac{7}{8} = \boxed{3}$$

- 3 A bakery sells cherry pies.
Each pie is cut into 12 slices.
The bakery has $2\frac{7}{12}$ pies left.
A customer buys $\frac{1}{3}$ of a pie.
How many pies are left?



$$\frac{1}{3} = \frac{4}{12} \quad \left(\begin{array}{l} \times 4 \\ \times 4 \end{array} \right)$$

$$2\frac{7}{12} - \frac{4}{12} = 2\frac{3}{12}$$

$$2\frac{3}{12} - \frac{1}{4} = 2\frac{1}{4} \quad \left(\begin{array}{l} \div 3 \\ \div 3 \end{array} \right) \quad \text{Simplest form}$$

There are $2\frac{1}{4}$ pies left.

- 4 Work out the following questions. Draw a diagram if this will help.

a) $2\frac{3}{4} - \frac{1}{2}$

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

$$2\frac{3}{4} - \frac{2}{4} = 2\frac{1}{4}$$

c) $2\frac{3}{4} - \frac{3}{8}$

$$\frac{3}{4} = \frac{6}{8}$$

$$2\frac{6}{8} - \frac{3}{8} = 2\frac{3}{8}$$

b) $1\frac{7}{10} - \frac{1}{2}$

$$\frac{1}{2} = \frac{5}{10}$$

$$1\frac{7}{10} - \frac{5}{10} = 1\frac{2}{10} = 1\frac{1}{5}$$

d) $1\frac{7}{10} - \frac{3}{5}$

$$\frac{3}{5} = \frac{6}{10}$$

$$1\frac{7}{10} - \frac{6}{10} = 1\frac{1}{10}$$

5 Work out the missing fractions.

a) $4\frac{5}{8} - \frac{\boxed{4}}{\boxed{8}} = 4\frac{1}{8}$
 or $\frac{1}{2}$ \nwarrow

b) $\boxed{3}\frac{\boxed{7}}{\boxed{9}} - \frac{2}{9} = 3\frac{5}{9}$

c) $\boxed{4}\frac{\boxed{}}{\boxed{}} - \frac{2}{9} = 3\frac{7}{9}$
 or $3\frac{9}{9}$

d) $8\frac{7}{12} - \frac{\boxed{7}}{\boxed{12}} = 8$

6 Two TV shows last $2\frac{7}{8}$ hours in total.

Adverts in the two shows last $\frac{1}{4}$ of an hour in total.

The first show lasts $\frac{1}{2}$ an hour.

How long does the second show last?

$\frac{1}{4} = \frac{2}{8} \quad 2\frac{7}{8} - \frac{2}{8} = 2\frac{5}{8}$
 $\frac{1}{2} = \frac{4}{8} \rightarrow 2\frac{5}{8} - \frac{4}{8} = 2\frac{1}{8}$

The second show lasts $\boxed{2}\frac{\boxed{1}}{\boxed{8}}$ hours.

CHALLENGE

Reflect

How do you know that $2\frac{3}{5} - \frac{3}{10}$ is greater than 2?

- $\frac{3}{5}$ is greater than $\frac{3}{10}$ because $\frac{3}{5} = \frac{6}{10}$. I can
- take away $\frac{3}{10}$ without any exchanging from the
- whole number so the answer will be greater than