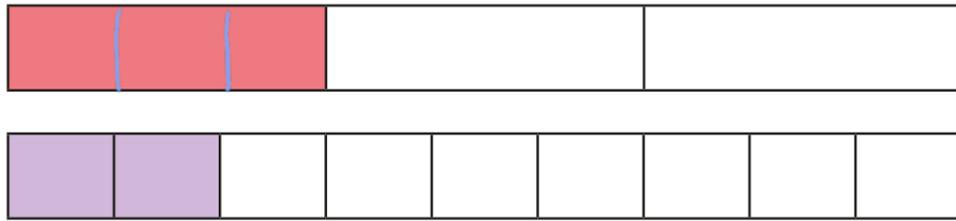# Add and subtract fractions (1)

1 Eva is working out $\frac{1}{3} + \frac{2}{9}$

She uses two fraction strips.
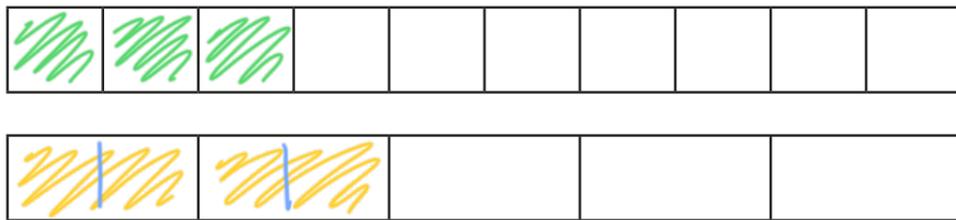
Use the fraction strips to help you complete the calculations.

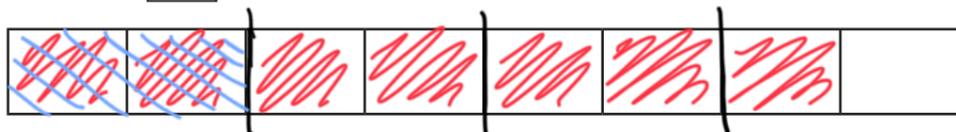$\frac{1}{3} = \frac{3}{9}$　　　　$\frac{1}{3} + \frac{2}{9} = \frac{3}{9} + \frac{2}{9} = \frac{5}{9}$

2 Complete the addition.

$\frac{3}{10} + \frac{2}{5} = \frac{7}{10}$

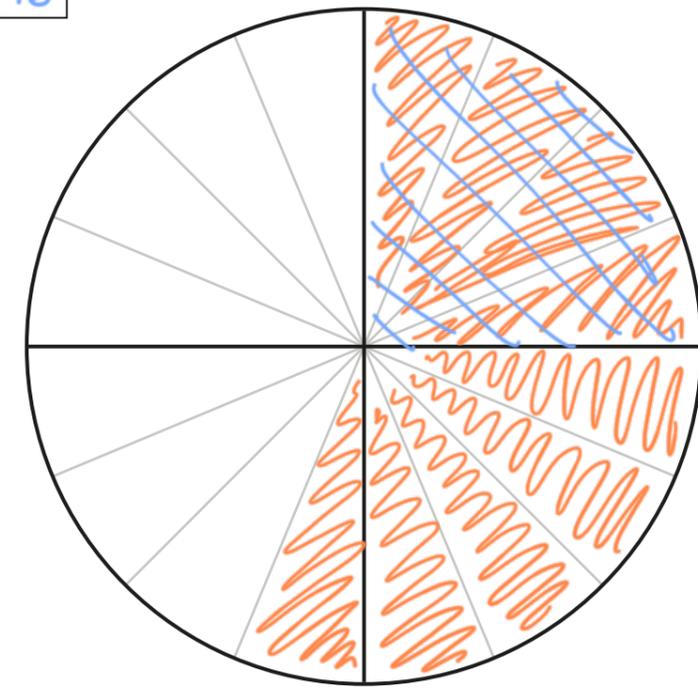**3** Use the bar model to complete the subtraction.

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

4 Use the diagram to complete the calculation.
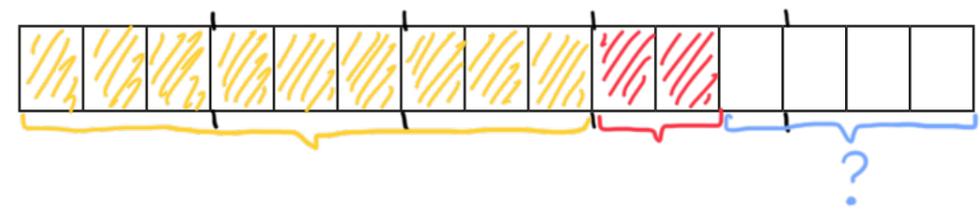
$\frac{9}{16} - \frac{1}{4} = \frac{5}{16}$

5 Mo spends $\frac{3}{5}$ of his pocket money on a present for his sister.

He gives $\frac{2}{15}$ of his pocket money to charity.

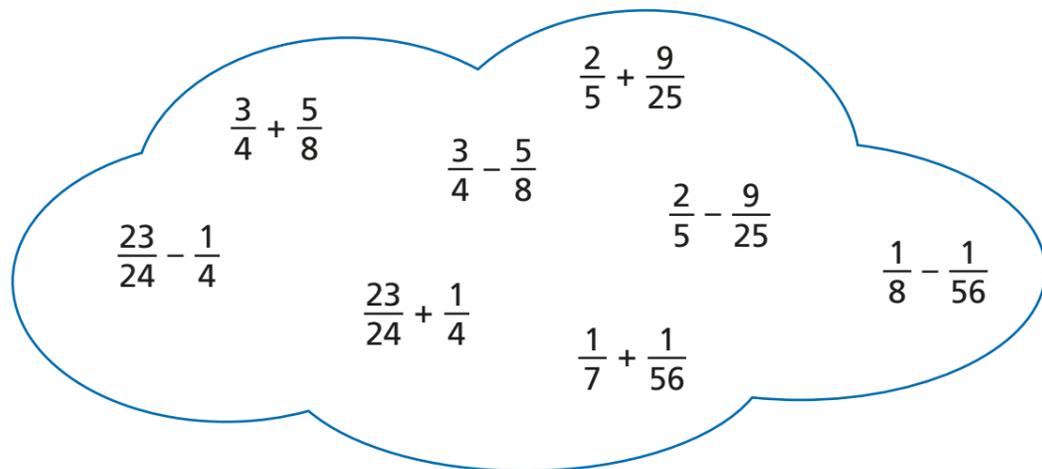What fraction of his pocket money does he have left?

You may use the fraction strip to help you.

$\frac{4}{15}$

6 Sort the calculations into the correct part of the table.

$$\frac{3}{4} + \frac{5}{8} \qquad \frac{2}{5} + \frac{9}{25}$$

$$\frac{3}{4} - \frac{5}{8} \qquad \frac{2}{5} - \frac{9}{25}$$

$$\frac{23}{24} - \frac{1}{4} \qquad \frac{23}{24} + \frac{1}{4} \qquad \frac{1}{8} - \frac{1}{56}$$

$$\frac{1}{7} + \frac{1}{56}$$

Calculations with answers less than 1		Calculations with answers greater than 1
$\frac{23}{24} - \frac{1}{4}$ $\frac{3}{4} - \frac{5}{8}$		$\frac{3}{4} + \frac{5}{8}$ $\frac{23}{24} + \frac{1}{4}$
$\frac{2}{5} + \frac{9}{25}$ $\frac{2}{5} - \frac{9}{25}$		
$\frac{1}{7} + \frac{1}{56}$ $\frac{1}{8} - \frac{1}{56}$		

7 Complete the calculations.
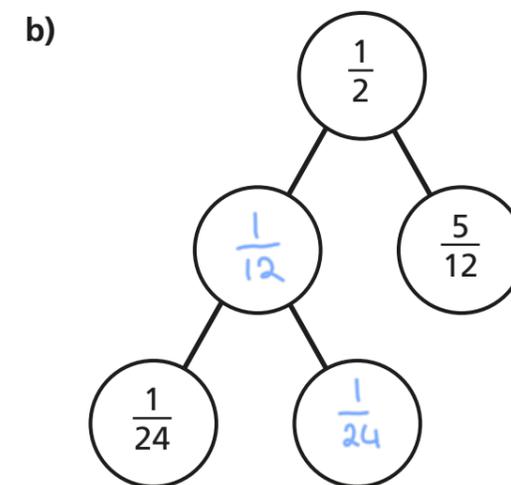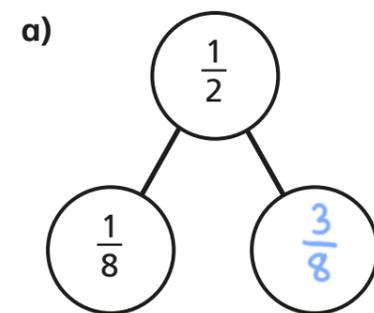
Give your answers in their simplest form.

a) $\frac{9}{20} + \frac{3}{5} = \boxed{1\frac{1}{20}}$

c) $\frac{2}{5} + \boxed{\frac{1}{6}} = \frac{17}{30}$

b) $\frac{9}{100} + \frac{7}{20} = \boxed{\frac{11}{25}}$

d) $\frac{17}{50} - \boxed{\frac{3}{20}} = \frac{19}{100}$

8 Complete the part-whole models.

a)

b)

9

A jug is filled with $\frac{9}{10}$ of a litre of juice.

$\frac{3}{50}$ of a litre of juice is poured into a glass.

$\frac{7}{100}$ of a litre of juice is poured into another glass.

How much juice is left in the jug?

$$\frac{9}{10} = \frac{90}{100} \qquad \frac{3}{50} = \frac{6}{100} \qquad \frac{6}{100} + \frac{7}{100} = \frac{13}{100} \qquad \frac{90}{100} - \frac{13}{100} = \frac{77}{100}$$

There is $\boxed{\frac{77}{100}}$ of a litre of juice left in the jug.

Talk about your method with a partner.