Add fractions

White Rose Maths

1 Complete the calculations.

Use the bar models to help you.

a)

$$\frac{1}{2} + \frac{7}{10} = \boxed{\frac{12}{10}} = \boxed{1\frac{1}{5}}$$

b)

$$\frac{1}{2} + \frac{3}{10} + \frac{1}{5} = \boxed{\frac{10}{10}} = \boxed{1}$$

c)
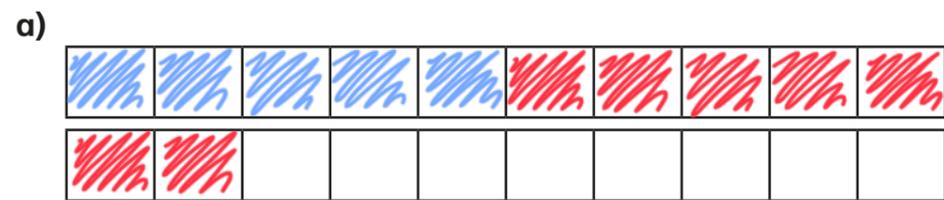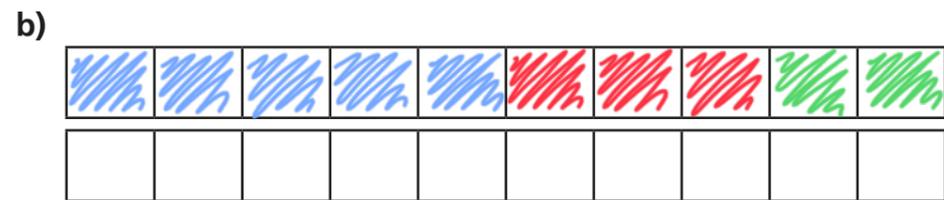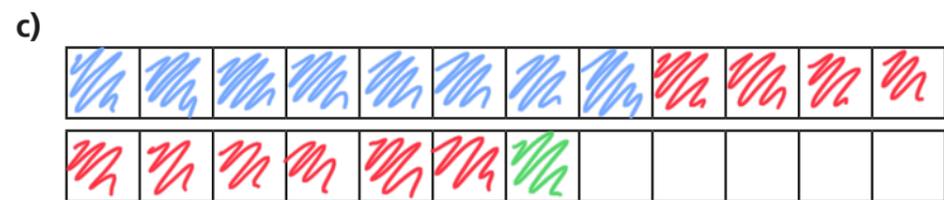
$$\frac{2}{3} + \frac{5}{6} + \frac{1}{12} = \boxed{\frac{19}{12}} = \boxed{1\frac{7}{12}}$$

2 Complete the additions.

a) $\frac{4}{5} + \frac{7}{20} = \boxed{\frac{23}{20}} = \boxed{1\frac{3}{20}}$

d) $\frac{4}{3} + \frac{5}{12} = \boxed{\frac{21}{12}} = \boxed{1\frac{3}{4}}$

b) $\frac{5}{4} + \frac{7}{20} = \boxed{\frac{32}{20}} = \boxed{1\frac{3}{5}}$

e) $\frac{3}{5} + \frac{11}{15} = \boxed{\frac{20}{15}} = \boxed{1\frac{1}{3}}$

c) $\frac{3}{4} + \frac{5}{12} = \boxed{\frac{14}{12}} = \boxed{1\frac{1}{6}}$

f) $\frac{5}{3} + \frac{11}{15} = \boxed{\frac{36}{15}} = \boxed{2\frac{2}{5}}$

3 Match the additions that have the same answer.

$\frac{3}{5} + \frac{9}{20}$	$\frac{16}{20} + \frac{9}{20}$
$\frac{3}{4} + \frac{9}{20}$	$\frac{12}{20} + \frac{9}{20}$
$\frac{4}{5} + \frac{9}{20}$	$\frac{14}{20} + \frac{9}{20}$
$\frac{7}{10} + \frac{9}{20}$	$\frac{15}{20} + \frac{9}{20}$

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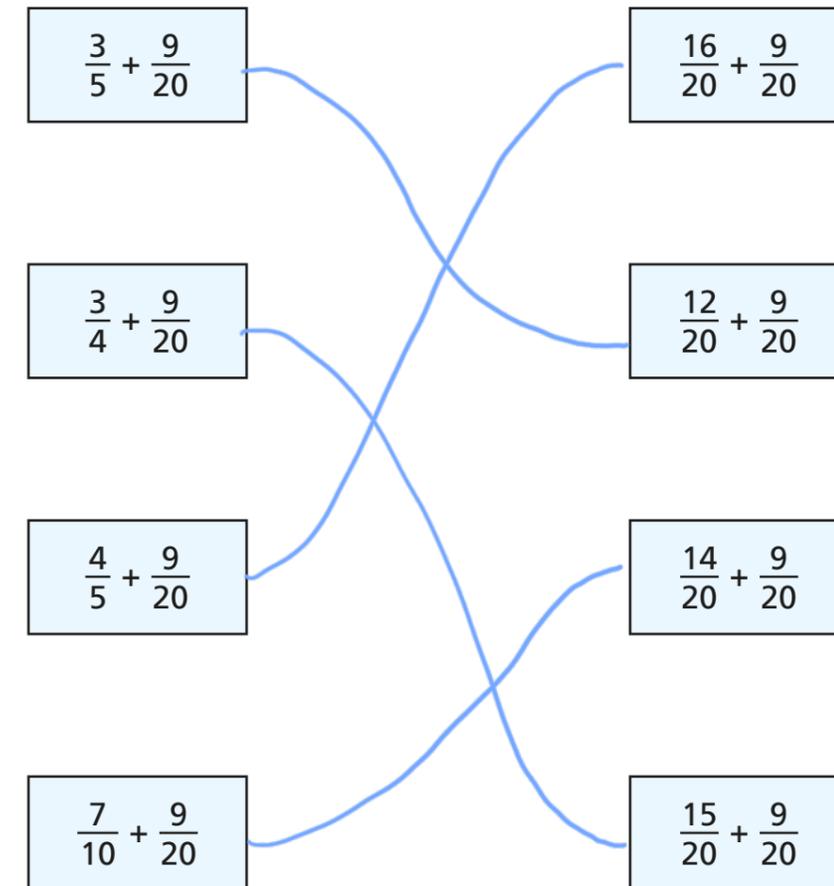
4 Dexter has some tins of food. There are four types of food: beans, sweetcorn, soup and tomatoes.

- The total weight of all the tins is 2 kg.

- The tins of beans weigh $\frac{2}{3}$ kg.

- The tins of sweetcorn weigh $\frac{5}{12}$ kg.

- The tins of soup weigh $\frac{1}{4}$ kg.
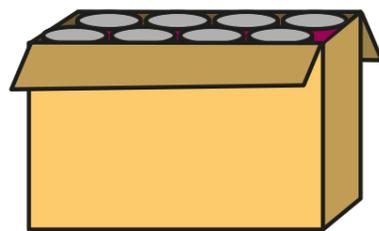
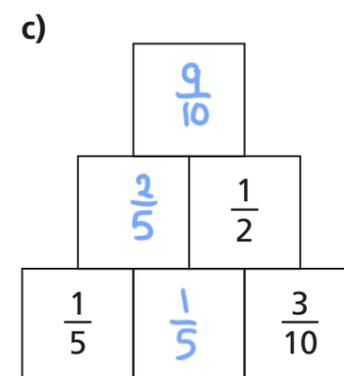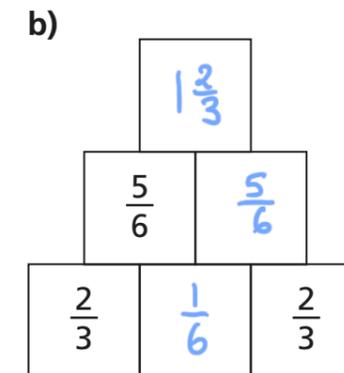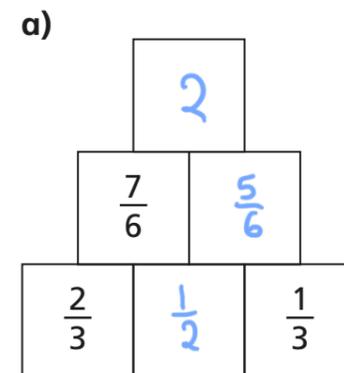**a)** Work out the total weight of the tins of beans, sweetcorn and soup.

$1\frac{1}{3}$ kg

b) How much do the tins of tomatoes weigh?

$\frac{2}{3}$ kg

5 Complete the addition pyramids.

a)

	2	
$\frac{7}{6}$		$\frac{5}{6}$
$\frac{2}{3}$	$\frac{1}{2}$	$\frac{1}{3}$

b)

	$1\frac{2}{3}$	
$\frac{5}{6}$		$\frac{5}{6}$
$\frac{2}{3}$	$\frac{1}{6}$	$\frac{2}{3}$

c)

	$\frac{9}{10}$	
$\frac{2}{5}$		$\frac{1}{2}$
$\frac{1}{5}$	$\frac{1}{5}$	$\frac{3}{10}$

6 What could the three missing numerators be?

$$\frac{\boxed{}}{4} + \frac{\boxed{}}{12} + \frac{\boxed{}}{3} = \frac{13}{12}$$

Give three different possibilities.

$$\frac{\boxed{1}}{4} + \frac{\boxed{6}}{12} + \frac{\boxed{1}}{3} = \frac{13}{12}$$

$$\frac{\boxed{2}}{4} + \frac{\boxed{3}}{12} + \frac{\boxed{1}}{3} = \frac{13}{12}$$

$$\frac{\boxed{1}}{4} + \frac{\boxed{2}}{12} + \frac{\boxed{2}}{3} = \frac{13}{12}$$