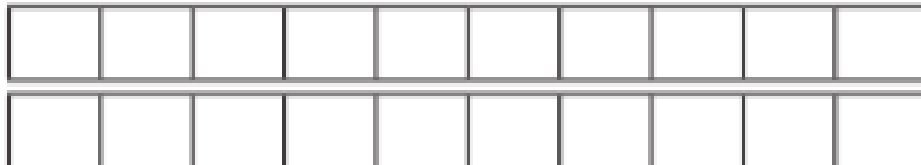


Task 1

1 Complete the calculations.

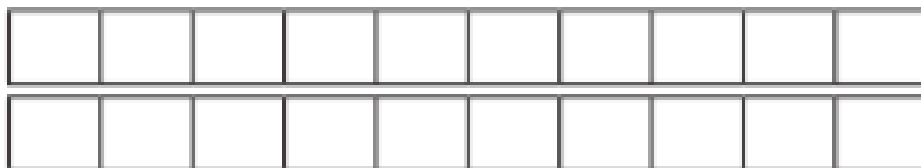
Use the bar models to help you.

a)



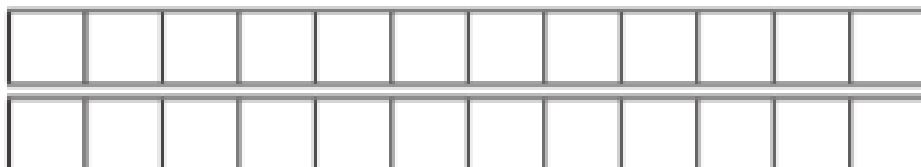
$$\frac{1}{2} + \frac{7}{10} = \boxed{} = \boxed{}$$

b)



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

c)



$$\frac{2}{3} + \frac{5}{6} + \frac{1}{12} = \boxed{} = \boxed{}$$

2 Complete the additions.

a) $\frac{4}{5} + \frac{7}{20} = \square = \square$

d) $\frac{4}{3} + \frac{5}{12} = \square = \square$

b) $\frac{5}{4} + \frac{7}{20} = \square = \square$

e) $\frac{3}{5} + \frac{11}{15} = \square = \square$

c) $\frac{3}{4} + \frac{5}{12} = \square = \square$

f) $\frac{5}{3} + \frac{11}{15} = \square = \square$

3 Match the additions that have the same answer.

$$\frac{3}{5} + \frac{9}{20}$$

$$\frac{16}{20} + \frac{9}{20}$$

$$\frac{3}{4} + \frac{9}{20}$$

$$\frac{12}{20} + \frac{9}{20}$$

$$\frac{4}{5} + \frac{9}{20}$$

$$\frac{14}{20} + \frac{9}{20}$$

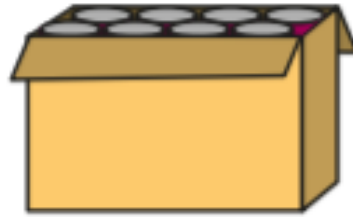
$$\frac{7}{10} + \frac{9}{20}$$

$$\frac{15}{20} + \frac{9}{20}$$

Task 2

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.

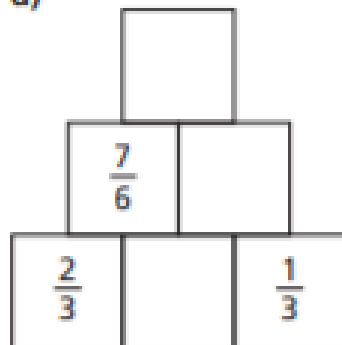


- b) How much do the tins of tomatoes weigh?

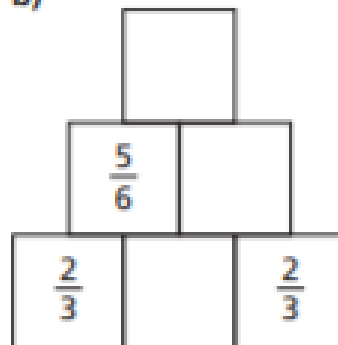


Complete the addition pyramids.

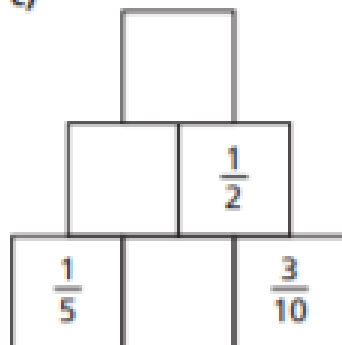
a)



b)



c)



What could the three missing numerators be?

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

Give three different possibilities.

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

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

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

Challenge



-
- If the answer to a word problem involving subtracting fractions with different denominators is $\frac{14}{32}$, what could the question be?
 - Katie subtracted $\frac{3}{5}$ away from a fraction and her answer was $\frac{8}{45}$. What was the original question?
 - Think of 3 questions for adding fractions with different denominators where the answer is $\frac{15}{17}$.
Could you do it? Why? Why not?

ANSWERS

Task 1- Answers

1 Complete the calculations.

Use the bar models to help you.

a)



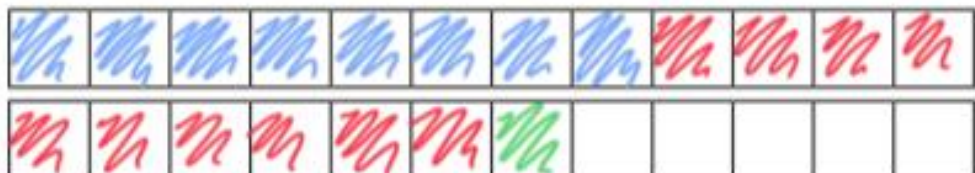
$$\frac{1}{2} + \frac{7}{10} = \boxed{\frac{12}{10}} = \boxed{1\frac{1}{5}}$$

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.

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

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

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

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

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

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

3 Match the additions that have the same answer.

$$\frac{3}{5} + \frac{9}{20}$$

$$\frac{16}{20} + \frac{9}{20}$$

$$\frac{3}{4} + \frac{9}{20}$$

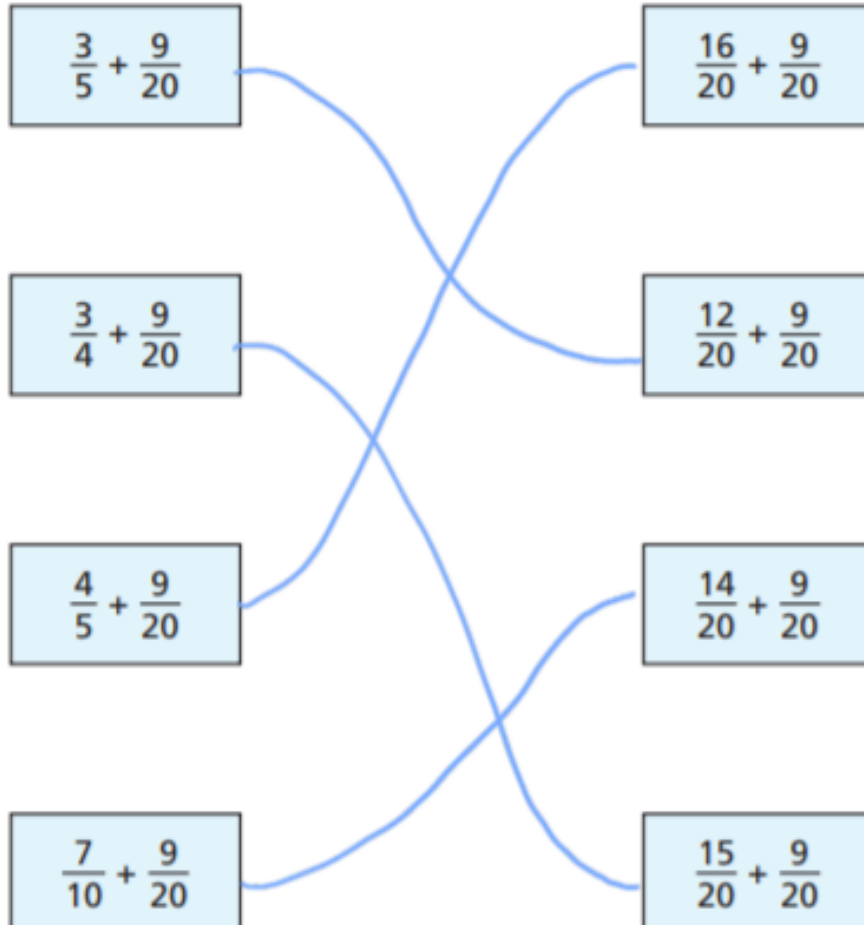
$$\frac{12}{20} + \frac{9}{20}$$

$$\frac{4}{5} + \frac{9}{20}$$

$$\frac{14}{20} + \frac{9}{20}$$

$$\frac{7}{10} + \frac{9}{20}$$

$$\frac{15}{20} + \frac{9}{20}$$



Task 2

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.

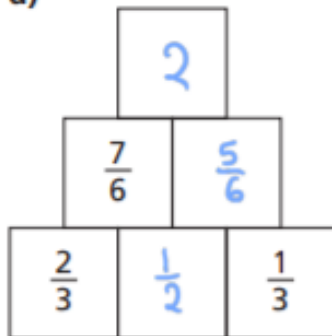
$$1\frac{1}{3} \text{ kg}$$

- b) How much do the tins of tomatoes weigh?

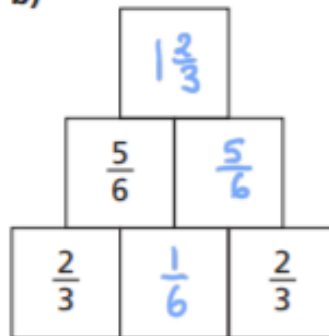
$$\frac{2}{3} \text{ kg}$$

Complete the addition pyramids.

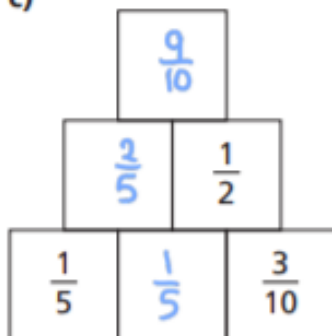
a)



b)



c)



What could the three missing numerators be?

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

Give three different possibilities.

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

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

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

Challenge – answers

-
- If the answer to a word problem involving subtracting fractions with different denominators is $\frac{14}{32}$, what could the question be?
 - Katie subtracted $\frac{3}{5}$ away from a fraction and her answer was $\frac{8}{45}$. What was the original question?
 - Think of 3 questions for adding fractions with different denominators where the answer is $\frac{15}{17}$.
Could you do it? Why? Why not?

Part 1 – different questions – will vary

Part 2 – $7/9 - 3/5$ or $35/45 - 27/45$

Part 3 – Different questions – will vary