Add fractions

1 Complete the calculations.
Use the bar models to help you.

a) \[
\frac{1}{2} + \frac{7}{10} = \square = \square
\]

b) \[
\frac{1}{2} + \frac{3}{10} + \frac{1}{5} = \square = \square
\]

c) \[
\frac{2}{3} + \frac{5}{6} + \frac{1}{12} = \square = \square
\]

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.

- \[
\frac{3}{5} + \frac{9}{20} = \square
\]
- \[
\frac{16}{20} + \frac{9}{20} = \square
\]
- \[
\frac{3}{4} + \frac{9}{20} = \square
\]
- \[
\frac{12}{20} + \frac{9}{20} = \square
\]
- \[
\frac{4}{5} + \frac{9}{20} = \square
\]
- \[
\frac{14}{20} + \frac{9}{20} = \square
\]
- \[
\frac{7}{10} + \frac{9}{20} = \square
\]
- \[
\frac{15}{20} + \frac{9}{20} = \square
\]
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.

   b) How much do the tins of tomatoes weigh?

5. Complete the addition pyramids.
   
   a)
   $$
   \begin{array}{c}
   \frac{7}{6} \\
   \frac{2}{3} \\
   \frac{1}{3}
   \end{array}
   $$

   b)
   $$
   \begin{array}{c}
   \frac{5}{6} \\
   \frac{2}{3} \\
   \frac{2}{3}
   \end{array}
   $$

   c)
   $$
   \begin{array}{c}
   \frac{1}{2} \\
   \frac{1}{5} \\
   \frac{3}{10}
   \end{array}
   $$

6. What could the three missing numerators be?

   \[ \frac{4}{4} + \frac{12}{12} + \frac{3}{3} = \frac{13}{12} \]

   Give three different possibilities.

   \[ \frac{4}{4} + \frac{12}{12} + \frac{3}{3} = \frac{13}{12} \]

   \[ \frac{4}{4} + \frac{12}{12} + \frac{3}{3} = \frac{13}{12} \]

   \[ \frac{4}{4} + \frac{12}{12} + \frac{3}{3} = \frac{13}{12} \]