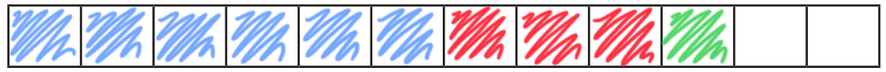
# Add 3 or more fractions

**1** Complete the additions.

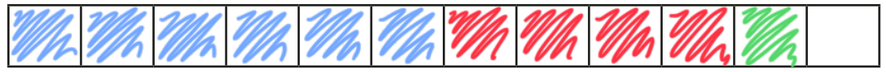
Use the bar models to help you.

**a)**



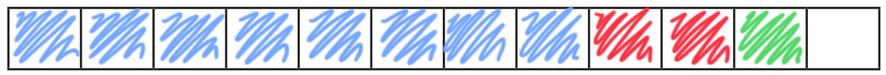
$\frac{1}{2} + \frac{1}{4} + \frac{1}{12} =$ $\frac{5}{6}$

**b)**



$\frac{1}{2} + \frac{1}{3} + \frac{1}{12} =$ $\frac{11}{12}$

**c)**



$\frac{2}{3} + \frac{1}{6} + \frac{1}{12} =$ $\frac{11}{12}$

**d)**

$\frac{1}{3} + \frac{1}{4} + \frac{1}{6} =$ $\frac{3}{4}$

**2** Complete the additions.

**a)** $\frac{1}{5} + \frac{3}{10} + \frac{7}{20} =$ $\frac{17}{20}$

**b)** $\frac{1}{16} + \frac{5}{32} + \frac{3}{8} =$ $\frac{19}{32}$

**c)** $\frac{1}{4} + \frac{5}{24} + \frac{5}{12} =$ $\frac{7}{8}$

**d)** $\frac{3}{16} + \frac{1}{2} + \frac{1}{4} =$ $\frac{15}{16}$

**e)** $\frac{1}{2} + \frac{5}{18} + \frac{1}{9} =$ $\frac{8}{9}$

**f)** $\frac{1}{5} + \frac{8}{35} + \frac{2}{7} =$ $\frac{5}{7}$

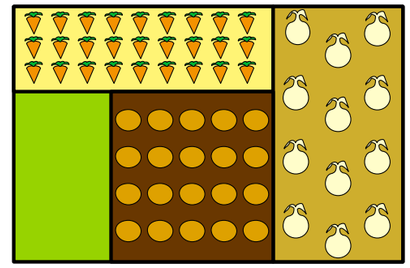
Explain how common multiples help when adding the fractions.

**3** Rosie has a vegetable patch.

$\frac{2}{9}$ of the patch contains carrots.

$\frac{5}{18}$ of the patch contains potatoes.

$\frac{1}{3}$ of the patch contains onions.

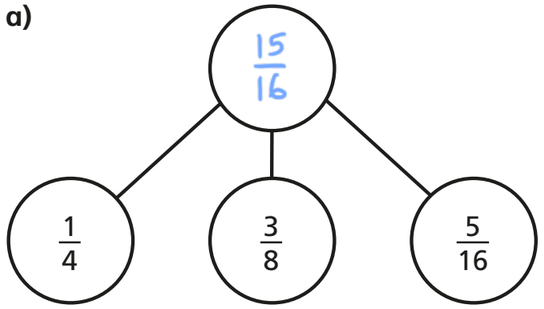


What fraction of the patch contains carrots, potatoes or onions?

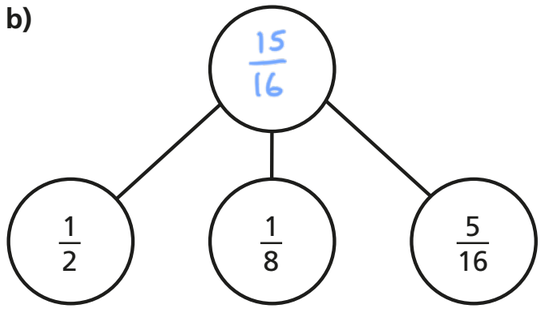
$\frac{5}{6}$ of the patch contains carrots, potatoes or onions.

**4** Complete the part-whole models.

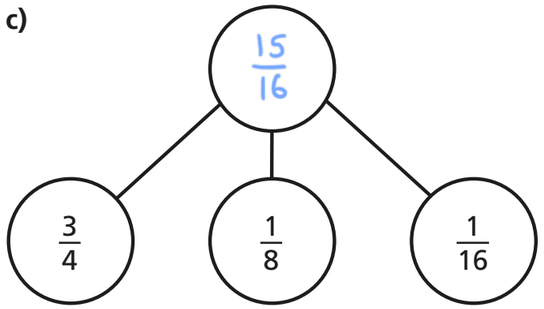
**a)**




**b)**




**c)**




**d)** Which one of the part-whole models is the odd one out?

Is there more than one answer?

Explain how you know.

Various answers.

**5** Fill in the missing numerators.

**a)** $\frac{1}{8} + \frac{\boxed{2}}{16} + \frac{3}{8} = \frac{5}{8}$

**b)** $\frac{1}{8} + \frac{\boxed{6}}{16} + \frac{3}{8} = \frac{7}{8}$

**c)** $\frac{1}{4} + \frac{\boxed{2}}{16} + \frac{3}{8} = \frac{3}{4}$

**d)** $\frac{1}{8} + \frac{\boxed{6}}{16} + \frac{1}{4} = \frac{3}{4}$

**e)** $\frac{1}{8} + \frac{1}{16} + \frac{\boxed{9}}{16} = \frac{3}{4}$

**f)** $\frac{1}{4} + \frac{1}{16} + \frac{\boxed{7}}{16} = \frac{3}{4}$

**6** Complete the number square.

The total of each column is $\frac{4}{5}$

The total of each row is $\frac{4}{5}$

| | | |
|---|---|---|
| $\frac{3}{10}$ | $\frac{2}{5}$ | $\frac{1}{10}$ |
| $\frac{3}{20}$ | $\frac{1}{10}$ | $\frac{11}{20}$ |
| $\frac{7}{20}$ | $\frac{3}{10}$ | $\frac{3}{20}$ |

Create your own problem like this for a partner.

| | | |
|---|---|---|
| | | |
| | | |
| | | |