Add fractions

1 Complete the additions.

Use the bar models to help you.
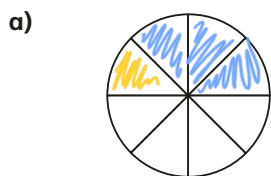
a) $\dfrac{1}{3} + \dfrac{1}{3} = \boxed{\dfrac{2}{3}}$

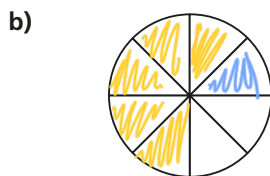**b)** $\dfrac{1}{5} + \dfrac{1}{5} = \boxed{\dfrac{2}{5}}$

c) $\dfrac{1}{5} + \dfrac{2}{5} = \boxed{\dfrac{3}{5}}$
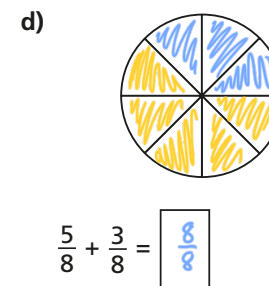
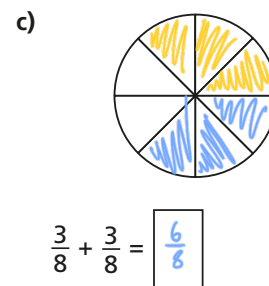**d)** $\dfrac{1}{5} + \dfrac{3}{5} = \boxed{\dfrac{4}{5}}$

2 Shade the circles and complete the additions.

a) $\dfrac{1}{8} + \dfrac{3}{8} = \boxed{\dfrac{4}{8}}$

b) $\dfrac{5}{8} + \dfrac{1}{8} = \boxed{\dfrac{6}{8}}$

c) $\dfrac{3}{8} + \dfrac{3}{8} = \boxed{\dfrac{6}{8}}$

d) $\dfrac{5}{8} + \dfrac{3}{8} = \boxed{\dfrac{8}{8}}$

3 Complete the part-whole models.

a)

$\dfrac{4}{9}$

$\dfrac{2}{9}$ $\dfrac{2}{9}$

b)

$\dfrac{4}{6}$

$\dfrac{1}{6}$ $\dfrac{3}{6}$

c)

$\dfrac{6}{6}$

$\dfrac{1}{6}$ $\dfrac{5}{6}$
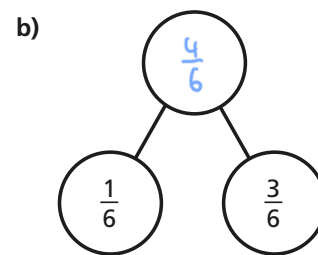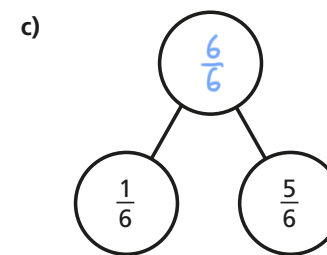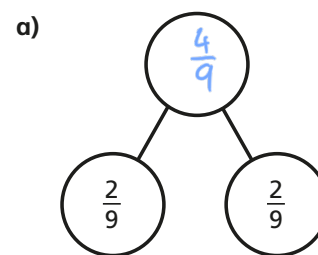
Which part-whole model is the odd one out? _various_

Talk about your choice with a partner. Did they choose the same odd one out?

4 Alex and Huan are eating a cake.

Alex eats $\frac{4}{7}$ of the cake.

Huan eats $\frac{2}{7}$ of the cake.

What fraction of the cake have they eaten altogether?

They have eaten $\boxed{\frac{6}{7}}$ of the cake altogether.

5 Teddy is adding fractions.

$$\frac{1}{4} + \frac{2}{4} = \frac{3}{8}$$

a) Draw a bar model to show that Teddy is wrong.

$$\frac{1}{4} + \frac{2}{4} = \frac{3}{4} \quad \text{not} \quad \frac{3}{8}$$

b) Complete the addition $\frac{1}{4} + \frac{2}{4} = \boxed{\frac{3}{4}}$

6 Annie has baked 12 muffins.

She puts them into 2 boxes.

What fraction of the muffins could she put in each box?

Complete the table to show four possibilities.

One has been done for you.

Box 1	Box 2
$\frac{1}{12}$	$\frac{11}{12}$
$\frac{2}{12}$	$\frac{10}{12}$
$\frac{3}{12}$	$\frac{9}{12}$
$\frac{4}{12}$	$\frac{8}{12}$
$\frac{5}{12}$	$\frac{7}{12}$
$\frac{6}{12}$	$\frac{6}{12}$

Are there any other possibilities? Talk about it with a partner.

7 Complete the additions.

a) $\frac{3}{8} + \frac{4}{8} = \boxed{\frac{7}{8}}$

d) $\frac{3}{103} + \frac{4}{103} = \boxed{\frac{7}{103}}$

b) $\frac{3}{9} + \frac{4}{9} = \boxed{\frac{7}{9}}$

e) $\frac{5}{31} + \frac{9}{31} = \boxed{\frac{14}{31}}$

c) $\frac{3}{29} + \frac{4}{29} = \boxed{\frac{7}{29}}$

f) $\frac{17}{111} + \frac{33}{111} = \boxed{\frac{50}{111}}$