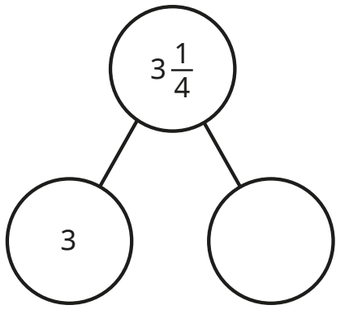
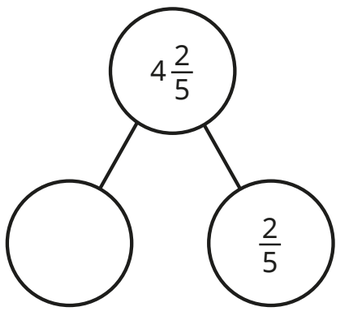
Add to a mixed number

1 Complete the part-whole models.

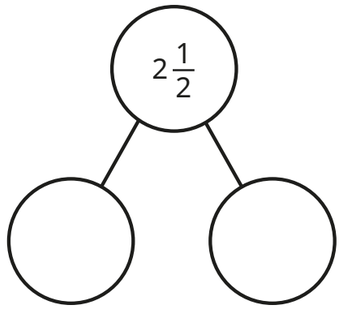
a)



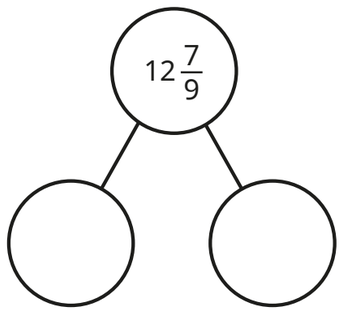
b)



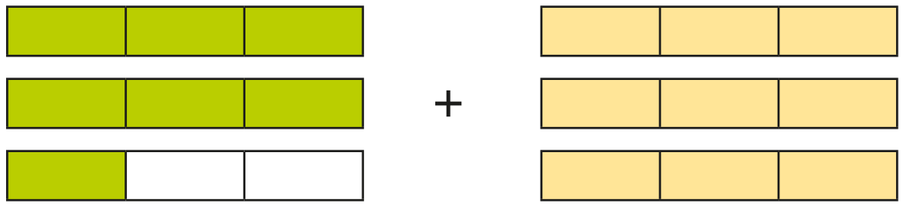
c)



d)



2 Filip is using bar models to add $2\frac{1}{3}$ and 3



Complete Filip's workings.

$2\frac{1}{3} + 3 = 2 + 3 + \frac{1}{3} = \square$

3 Complete the additions.

a) $4\frac{1}{5} + 3 = \square$

b) $3\frac{4}{7} + 5 = \square$

c) $7 + 2\frac{1}{4} = \square$

d) $5 + 5\frac{4}{9} = \square$

e) $12 + 3\frac{7}{8} = \square$

f) $26\frac{2}{5} + 17 = \square$

g) $3\frac{1}{9} + 4 + 6 = \square$

h) $8 + 8\frac{8}{11} + 12 = \square$

4 Here is Brett's method for working out $3\frac{4}{7} + \frac{2}{7}$

$3\frac{4}{7} + \frac{2}{7}$

$3 + \frac{4}{7} + \frac{2}{7}$

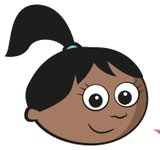
$3 + \frac{6}{7} = \square$

Use Brett's method to work out the additions.

a) $5\frac{4}{9} + \frac{3}{9} = \square$

b) $\frac{7}{11} + 4\frac{3}{11} = \square$

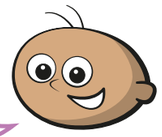
5 Sam and Tommy are finding the sum of $3\frac{3}{10}$ and $\frac{2}{10}$



Sam

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

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



Tommy

Who do you agree with? _____

Explain your reasoning.

6 Complete the additions.

Use equivalent fractions in your answer, if possible.

a) $5\frac{1}{8} + \frac{3}{8} =$ ☐

b) $5\frac{3}{8} + \frac{3}{8} =$ ☐

c) $\frac{2}{12} + 3\frac{7}{12} =$ ☐

d) $\frac{2}{9} + 4\frac{7}{9} =$ ☐

7 Nijah is using equivalent fractions to work out $2\frac{1}{2} + \frac{3}{8}$

$$2\frac{1}{2} + \frac{3}{8} = 2\frac{4}{8} + \frac{3}{8} = 2\frac{7}{8}$$

Use Nijah's method to work out the additions.

a) $4\frac{1}{3} + \frac{4}{9} =$ ☐

b) $\frac{1}{4} + 5\frac{5}{12} =$ ☐

8 Tiny is finding the sum of $\frac{2}{9}$ and $3\frac{1}{3}$

$$\frac{2}{9} + 3\frac{1}{3} = 3\frac{3}{12}$$

a) What mistake has Tiny made?

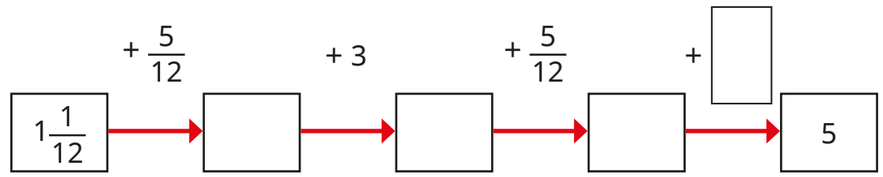
_____

_____

b) What is the correct answer?

☐

9 Complete the calculations.



10 Work out the missing numbers.

$$5\frac{\square}{3} + \frac{2}{\square} = \square + 3\frac{8}{9}$$