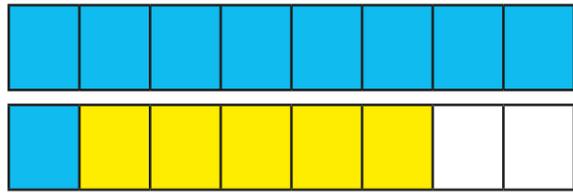


# Add fractions and mixed numbers

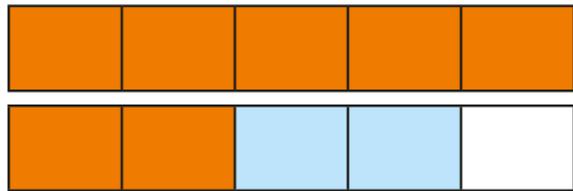
1 Use the bar models to work out the additions.

a)



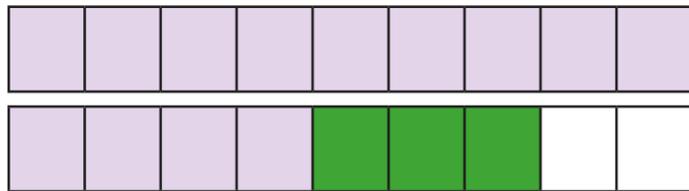
$$1\frac{1}{8} + \frac{5}{8} = \square$$

b)



$$1\frac{2}{5} + \frac{2}{5} = \square$$

c)

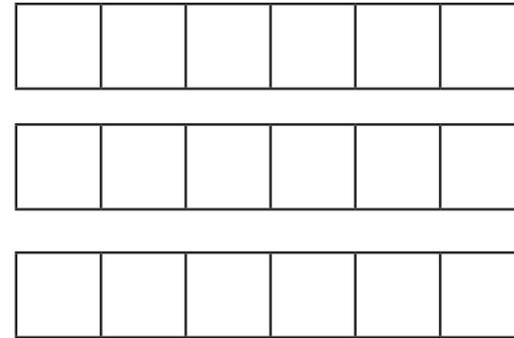


$$1\frac{4}{9} + \frac{3}{9} = \square$$

What do you notice?

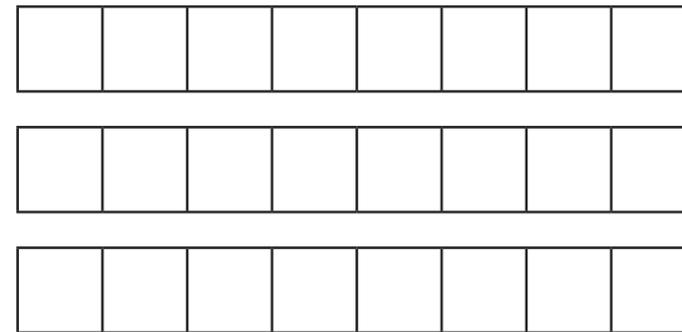


2 Shade the bar model to show that  $2\frac{1}{6} + \frac{4}{6} = 2\frac{5}{6}$

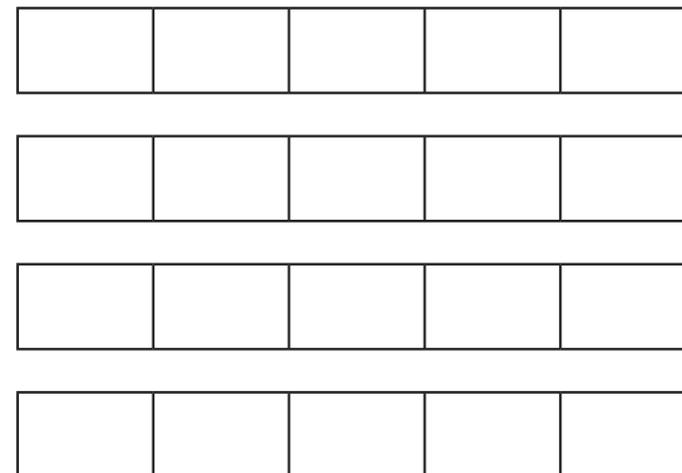


3 Shade the bar models to work out the additions.

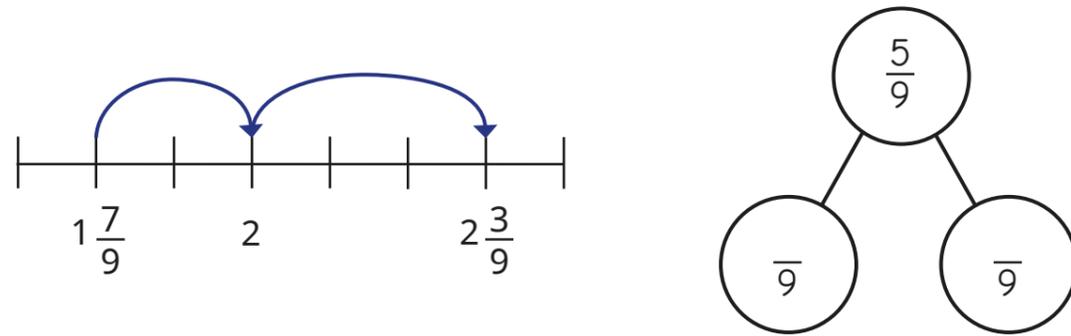
a)  $2\frac{3}{8} + \frac{2}{8} = \square$



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



- 4 Brett is using a number line to work out  $1\frac{7}{9} + \frac{5}{9}$



- a) Complete the part-whole model to show how Brett has partitioned  $\frac{5}{9}$

- b) Complete the calculation.

$$1\frac{7}{9} + \frac{5}{9} = 1\frac{7}{9} + \frac{\square}{9} + \frac{\square}{9}$$

$$= 2 + \frac{\square}{9}$$

$$= \square$$

- 5 Complete the additions.

a)  $4\frac{3}{6} + \frac{5}{6} = \square$

c)  $\square = 2\frac{5}{8} + \frac{7}{8}$

b)  $\frac{6}{7} + 3\frac{4}{7} = \square$

d)  $7\frac{4}{17} + \frac{16}{17} = \square$

- 6 Tiny is working out  $5\frac{7}{10} + \frac{6}{10}$



$$\frac{7}{10} + \frac{6}{10} = \frac{13}{10}$$

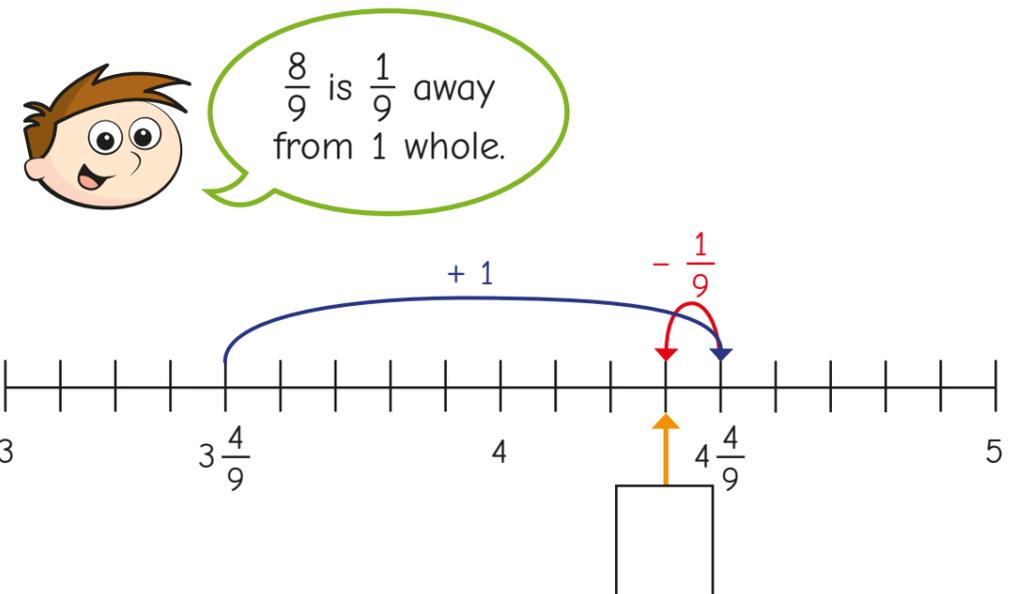
$$\frac{13}{10} + 5 = 5\frac{13}{10}$$

$$5\frac{7}{10} + \frac{6}{10} = 5\frac{13}{10}$$

How can Tiny's answer be improved?

- 7 Teddy is using a number line to work out  $3\frac{4}{9} + \frac{8}{9}$

- a) Complete Teddy's workings.



- b) Use Teddy's method to work out the additions.

$2\frac{6}{9} + \frac{8}{9} = \square$

$5\frac{3}{7} + \frac{6}{7} = \square$