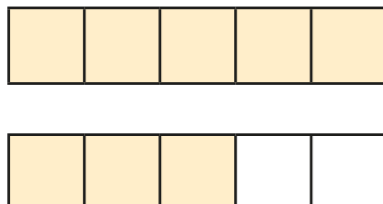
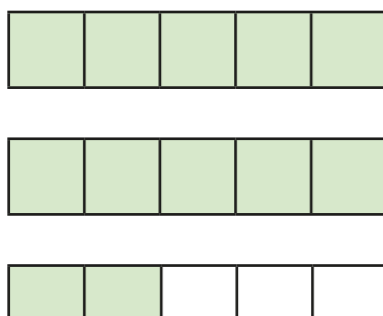
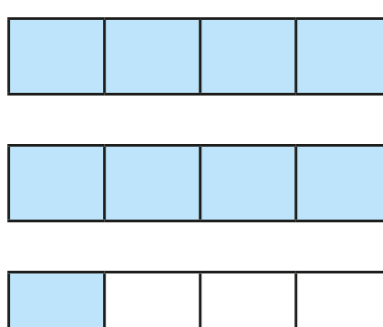


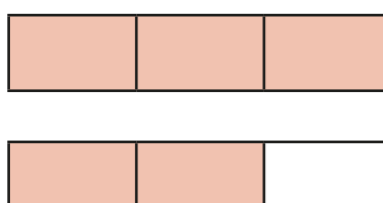
# Improper to mixed numbers

1 Convert the improper fractions to mixed numbers.

a)   $\frac{8}{5} = 1\frac{3}{5}$

b)   $\frac{12}{5} = 2\frac{2}{5}$

c)   $\frac{9}{4} = 2\frac{1}{4}$

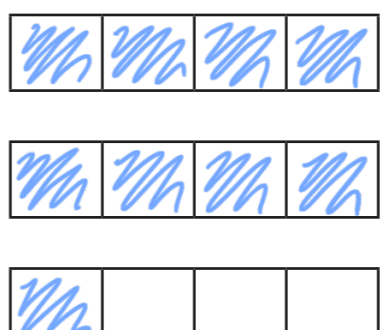
d)   $\frac{5}{3} = 1\frac{2}{3}$



2 Shade the bar models to represent each improper fraction.  
Convert the improper fractions to mixed numbers.

a)   $\frac{7}{3} = 2\frac{1}{3}$

b)   $\frac{8}{3} = 2\frac{2}{3}$

c)   $\frac{9}{4} = 2\frac{1}{4}$

d)   $\frac{11}{4} = 2\frac{3}{4}$



3 Convert the improper fractions to mixed numbers.

a)  $\frac{10}{2} =$

e)  $\frac{12}{5} =$

b)  $\frac{10}{3} =$

f)  $\frac{13}{6} =$

c)  $\frac{10}{4} =$

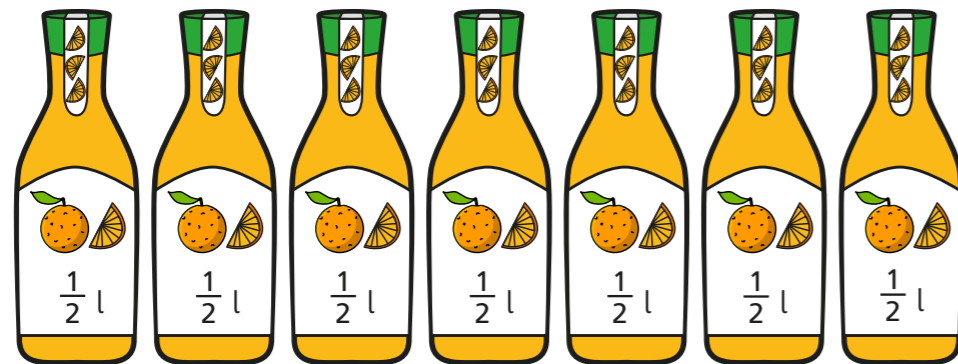
g)  $\frac{13}{7} =$

d)  $\frac{10}{5} =$

h)  $\frac{31}{8} =$

4 Eva has 7 bottles of juice.

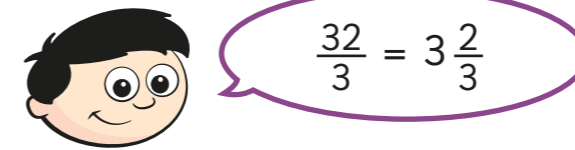
Each bottle contains half a litre of juice.



How many litres of juice does Eva have altogether?

Write your answer as a mixed number.

5 Dexter is converting improper fractions.



Explain why Dexter is incorrect.

6 Find the value of ●

$$\frac{27}{\text{●}} = \text{●} \frac{2}{\text{●}}$$

● =

7 Find two possible values for ★ and ▲

$$\frac{30}{\text{★}} = \text{▲} \frac{2}{\text{★}}$$

★ =

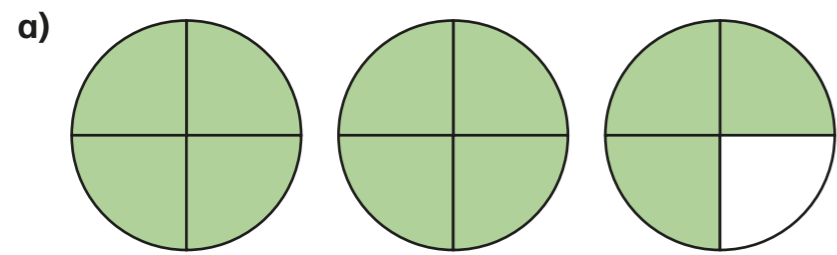
▲ =

★ =

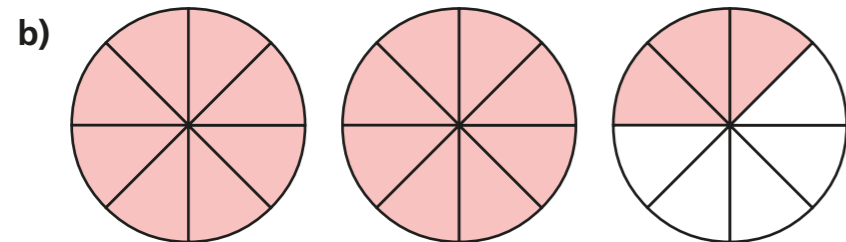
▲ =

# Mixed numbers to improper fractions

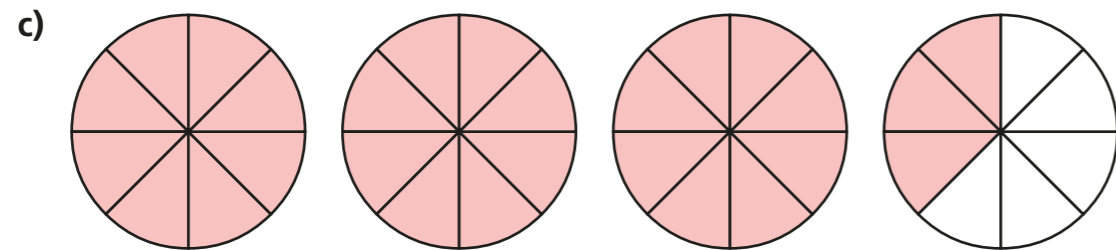
1 Convert the mixed numbers to improper fractions.



$$2\frac{3}{4} = \frac{\square}{4}$$



$$2\frac{3}{8} = \frac{\square}{8}$$



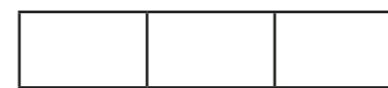
$$3\frac{3}{8} = \frac{\square}{8}$$

2 Convert the mixed numbers to improper fractions.

Colour the bar models to help you.



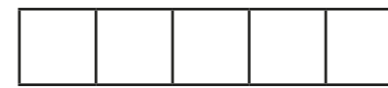
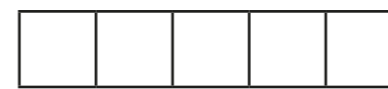
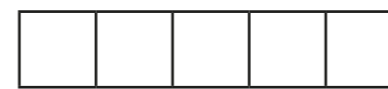
$$2\frac{1}{4} = \square$$



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



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



$$3\frac{2}{5} = \square$$



3 Convert the mixed numbers to improper fractions.

Write the next conversion in each part.

a)  $2\frac{1}{7} = \frac{15}{7}$

$2\frac{2}{7} = \frac{16}{7}$

$2\frac{3}{7} = \frac{17}{7}$

$2\frac{4}{7} = \frac{18}{7}$

c)  $5\frac{1}{2} = \frac{11}{2}$

$5\frac{1}{4} = \frac{21}{4}$

$5\frac{1}{8} = \frac{41}{8}$

$5\frac{1}{16} = \frac{81}{16}$

b)  $3\frac{1}{5} = \frac{16}{5}$

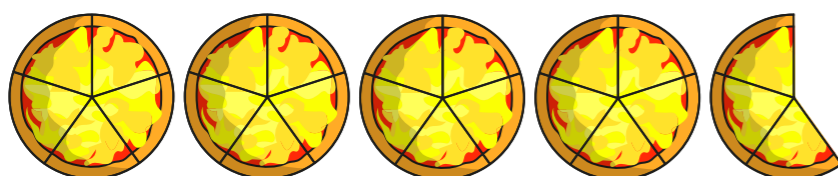
$4\frac{1}{5} = \frac{21}{5}$

$5\frac{1}{5} = \frac{26}{5}$

$6\frac{1}{5} = \frac{31}{5}$

Talk to a partner about any patterns you spot.

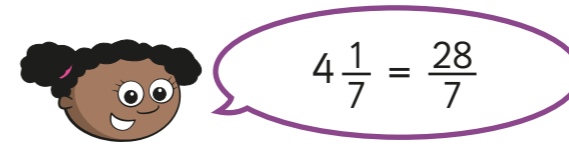
4 Here are 4 whole pizzas and  $\frac{3}{5}$  of a pizza.



How many children can have  $\frac{1}{5}$  of a pizza?

23

5 Whitney is converting mixed numbers to improper fractions.



Do you agree with Whitney? No

Explain your answer.

She has converted 4 wholes to  $\frac{28}{7}$  but forgotten to add the extra seventh.

6

$\text{circle} \frac{3}{5} = \text{triangle} \frac{1}{5}$

The table shows some possible values of the circle.

Use this to find the corresponding value of the triangle.

●	▲
1	8
2	13
4	23
8	43
16	83
17	88
160	803