

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) $\frac{10}{2} =$ 5

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

b) $\frac{10}{3} =$ $3\frac{1}{3}$

f) $\frac{13}{6} =$ $2\frac{1}{6}$

c) $\frac{10}{4} =$ $2\frac{1}{2}$

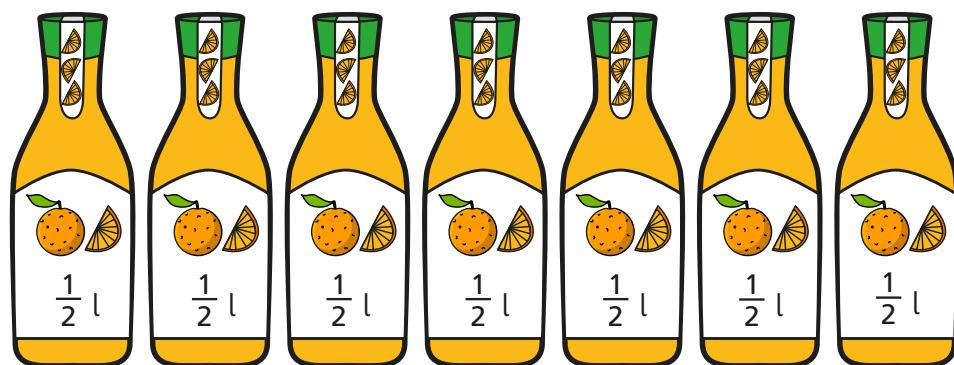
g) $\frac{13}{7} =$ $1\frac{6}{7}$

d) $\frac{10}{5} =$ 2

h) $\frac{31}{8} =$ $3\frac{7}{8}$

4 Eva has 7 bottles of juice.

Each bottle contains half a litre of juice.

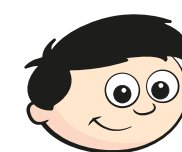


How many litres of juice does Eva have altogether?

Write your answer as a mixed number.

$3\frac{1}{2}$ l

5 Dexter is converting improper fractions.



$\frac{32}{3} = 3\frac{2}{3}$

Explain why Dexter is incorrect.

6 Find the value of \bigcirc

$\frac{27}{\bigcirc} = \bigcirc \frac{2}{\bigcirc}$

$\bigcirc =$ 5

7 Find two possible values for \star and \blacktriangle

$\frac{30}{\star} = \blacktriangle \frac{2}{\star}$

$\star =$ 14

$\blacktriangle =$ 2

$\star =$ 7

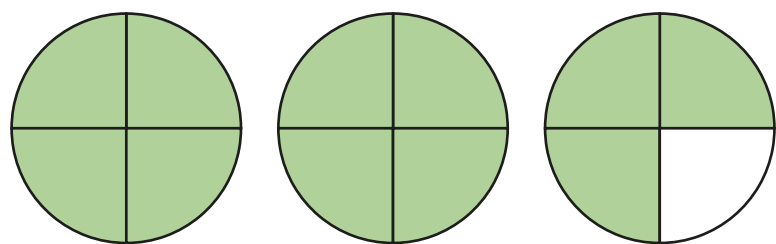
$\blacktriangle =$ 4

Mixed numbers to improper fractions



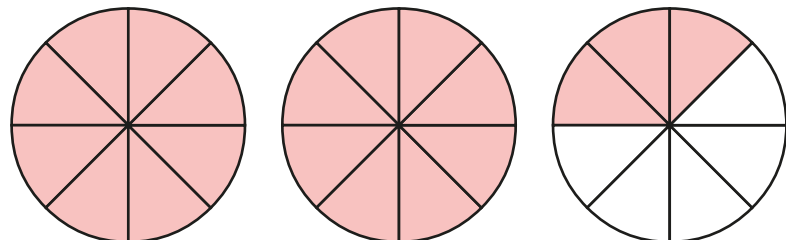
1 Convert the mixed numbers to improper fractions.

a)



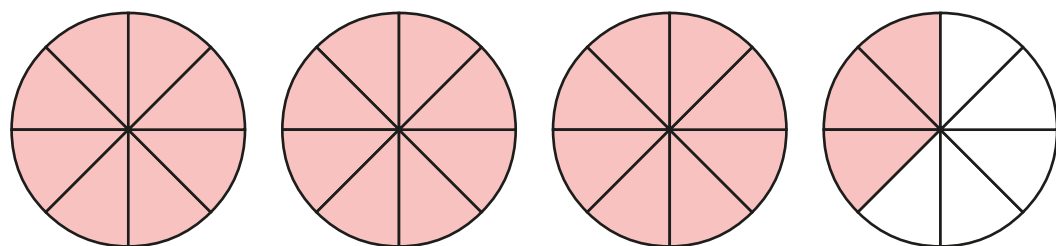
$$2\frac{3}{4} = \frac{\boxed{}}{4}$$

b)



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

c)

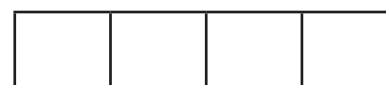


$$3\frac{3}{8} = \frac{\boxed{}}{8}$$

2 Convert the mixed numbers to improper fractions.

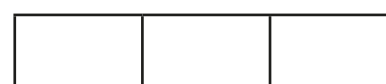
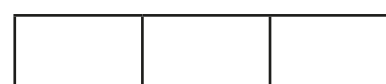
Colour the bar models to help you.

a)



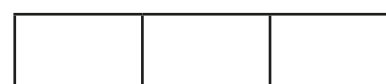
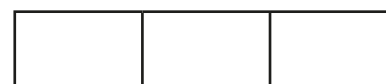
$$2\frac{1}{4} = \boxed{}$$

b)



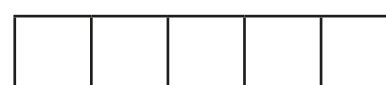
$$2\frac{1}{3} = \boxed{}$$

c)

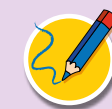


$$3\frac{1}{3} = \boxed{}$$

d)



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



3 Convert the mixed numbers to improper fractions.

Write the next conversion in each part.

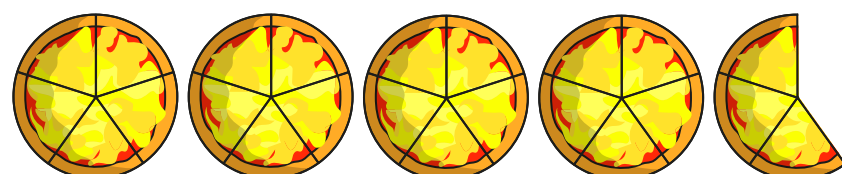
a) $2\frac{1}{7} = \frac{15}{7}$
 $2\frac{2}{7} = \frac{16}{7}$
 $2\frac{3}{7} = \frac{17}{7}$
 $2\frac{4}{7} = \frac{18}{7}$

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.

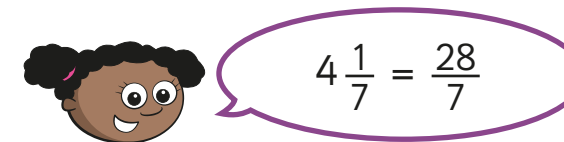
4 Here are 4 whole pizzas and $\frac{3}{5}$ of a pizza.



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.

circle	triangle
1	8
2	13
4	23
8	43
16	83
17	88
160	803