

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

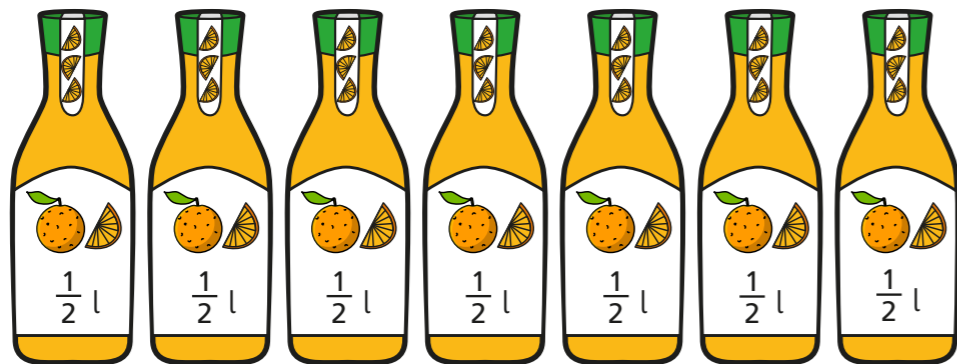
g) $\frac{13}{7} = 1\frac{6}{7}$

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 ●

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

● = 5

7 Find two possible values for ★ and ▲

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

★ = 14

▲ = 2

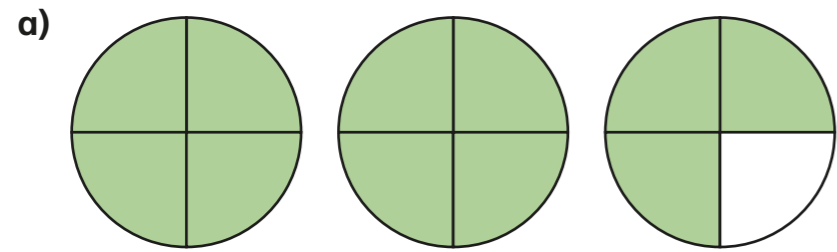
★ = 7

▲ = 4

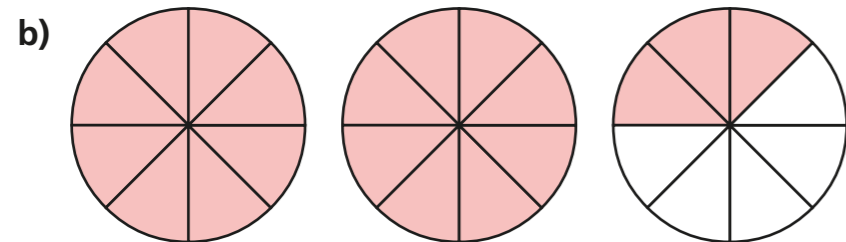
Mixed numbers to improper fractions



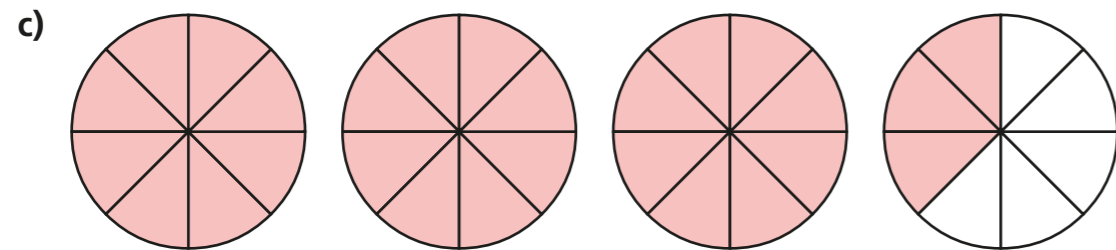
1 Convert the mixed numbers to improper fractions.



$$2\frac{3}{4} = \frac{\boxed{11}}{4}$$



$$2\frac{3}{8} = \frac{\boxed{19}}{8}$$



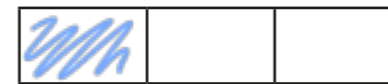
$$3\frac{3}{8} = \frac{\boxed{27}}{8}$$

2 Convert the mixed numbers to improper fractions.

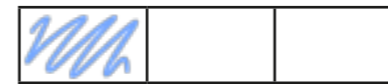
Colour the bar models to help you.



$$2\frac{1}{4} = \frac{\boxed{9}}{4}$$



$$2\frac{1}{3} = \frac{\boxed{7}}{3}$$



$$3\frac{1}{3} = \frac{\boxed{10}}{3}$$



$$3\frac{2}{5} = \frac{\boxed{17}}{5}$$



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

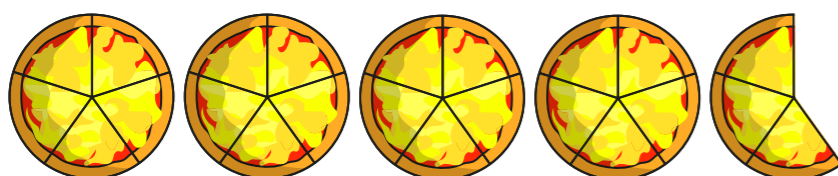
$4\frac{1}{5} = \frac{21}{5}$

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

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

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.



$4\frac{1}{7} = \frac{28}{7}$

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