Convert between mixed numbers and fractions

1 Which is the mixed number?

$$1\frac{1}{2} \qquad\qquad \frac{3}{2} \qquad\qquad 1.5$$

2 Which is the improper fraction?

$$1\frac{1}{2} \qquad\qquad \frac{3}{2} \qquad\qquad 1.5$$

3 **a)** Write the numbers represented by the diagrams as a mixed number and as an improper fraction.
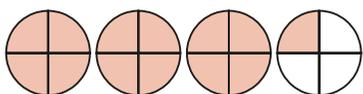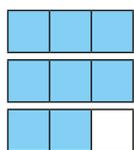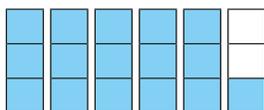

b) Draw a representation of the mixed number $1\frac{3}{5}$

c) Write $1\frac{3}{5}$ as an improper fraction.

d) Draw a representation of the improper fraction $\frac{8}{5}$

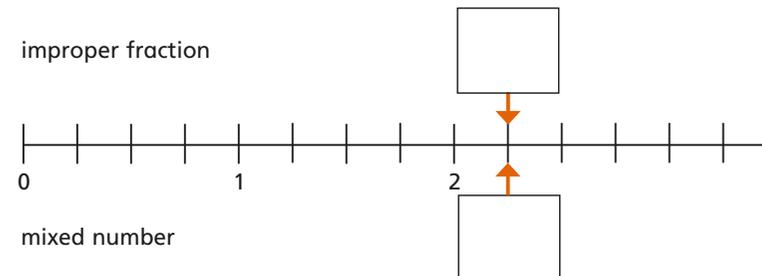**4** Filip has been asked to draw a representation of five thirds.

Here is his answer.

a) Explain the mistake that Filip has made.

b) Draw a representation of five thirds.

c) Write five thirds as a mixed number.
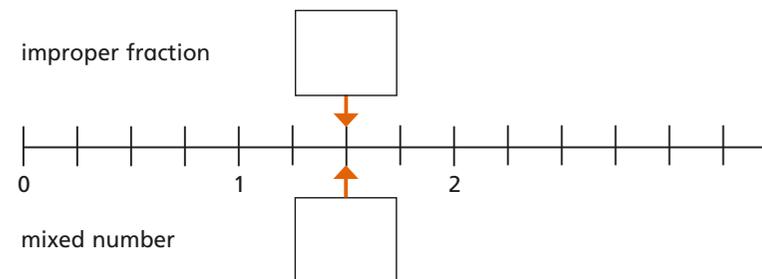
5 Write the numbers as improper fractions and mixed numbers.

a)
improper fraction

mixed number

b)
improper fraction

mixed number

6 Dani is working out $3\frac{1}{4}$ as an improper fraction.

Here is her working out.

$$3 \times 1 + 4 = 7$$
$$\text{So } 3\frac{1}{4} = \frac{7}{4}$$

What mistake has Dani made?

7 Convert the mixed numbers to improper fractions.

a) $2\frac{1}{3}$ \qquad **b)** $3\frac{2}{5}$ \qquad **c)** $6\frac{3}{4}$ \qquad **d)** $2\frac{9}{10}$

5 Write the numbers as improper fractions and mixed numbers.

a)

improper fraction

0   1   2

mixed number

b)

improper fraction

0   1   2

mixed number

6 Dani is working out $3\frac{1}{4}$ as an improper fraction.

Here is her working out.

$$3 \times 1 + 4 = 7$$
$$\text{So } 3\frac{1}{4} = \frac{7}{4}$$

What mistake has Dani made?

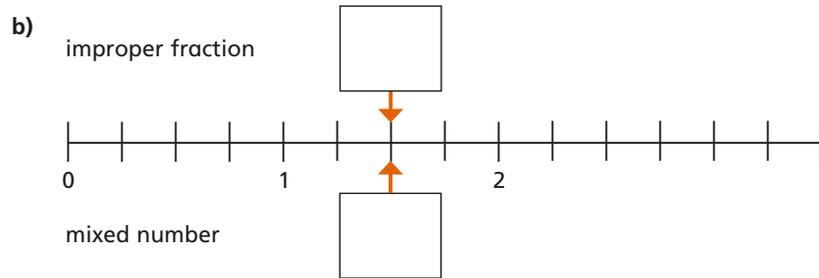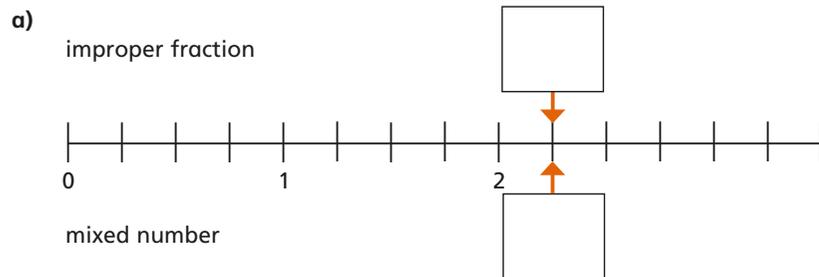**7** Convert the mixed numbers to improper fractions.

a) $2\frac{1}{3}$ **b)** $3\frac{2}{5}$ **c)** $6\frac{3}{4}$ **d)** $2\frac{9}{10}$

8 Convert the improper fractions to mixed numbers.

a) $\frac{7}{2}$

b) $\frac{7}{3}$

c) $\frac{19}{6}$

d) $\frac{87}{10}$

9 Fill in the missing numbers.

a) $\frac{11}{\boxed{}} = 2\frac{3}{\boxed{}}$ **c)** $\frac{22}{\boxed{}} = 4\frac{2}{\boxed{}}$

b) $\frac{19}{3} = \boxed{}\frac{\boxed{}}{3}$ **d)** $\frac{37}{5} = \boxed{}\frac{\boxed{}}{10}$

10 Complete the statement.

$$5\frac{1}{4} = 4\frac{\boxed{}}{4} = 3\frac{\boxed{}}{4} = 2\frac{\boxed{}}{4} = 1\frac{\boxed{}}{4} = \frac{\boxed{}}{4}$$

What did you notice? Why did this happen?