

Convert between mixed numbers and fractions

1 Circle the mixed number.

$1\frac{1}{2}$

$\frac{3}{2}$

1.5

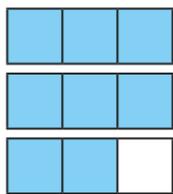
2 Circle the improper fraction.

$1\frac{1}{2}$

$\frac{3}{2}$

1.5

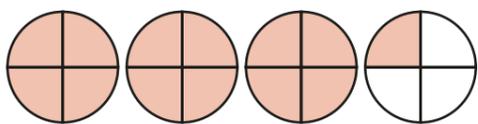
3 a) Write the numbers represented by the diagrams as a mixed number and as an improper fraction.



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



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



$3\frac{1}{4}$ $\frac{13}{4}$

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

E.g.

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

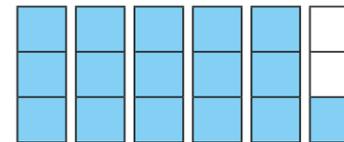
$\frac{8}{5}$

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

E.g.

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.

e.g.

c) Write five thirds as a mixed number.

$1\frac{2}{3}$

5 Write the numbers as improper fractions and mixed numbers.

a) improper fraction

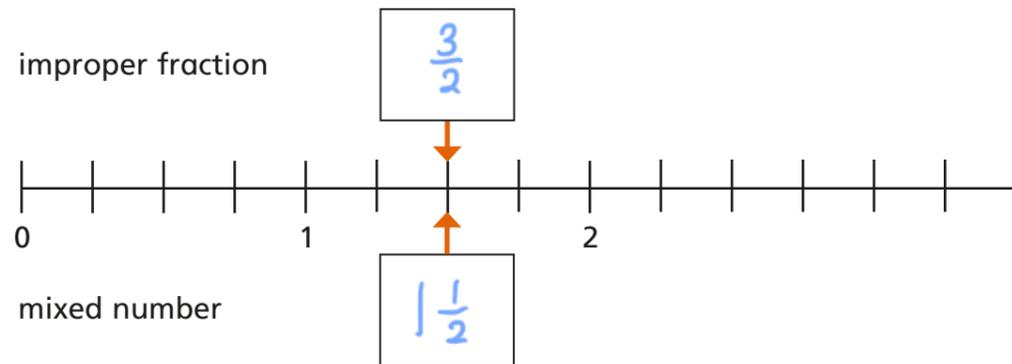
$\frac{9}{4}$



mixed number

$2\frac{1}{4}$

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

c) $6\frac{3}{4} = \frac{27}{4}$

b) $3\frac{2}{5} = \frac{17}{5}$

d) $2\frac{9}{10} = \frac{29}{10}$

- 8 Convert the improper fractions to mixed numbers.

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

c) $\frac{19}{6} = 3\frac{1}{6}$

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

d) $\frac{87}{10} = 8\frac{7}{10}$

- 9 Fill in the missing numbers.

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

c) $\frac{22}{5} = 4\frac{2}{5}$

b) $\frac{19}{3} = 6\frac{1}{3}$

d) $\frac{37}{5} = 7\frac{4}{5}$

- 10 Complete the statement.

$$5\frac{1}{4} = 4\frac{5}{4} = 3\frac{9}{4} = 2\frac{13}{4} = 1\frac{17}{4} = \frac{21}{4}$$

What did you notice? Why did this happen?

The numerator increased by 4 each time because $\frac{4}{4}$ is equal to one whole.