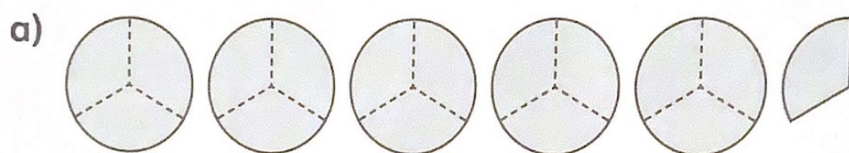
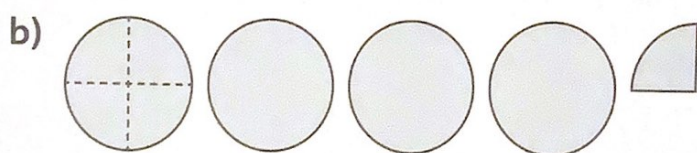


Converting mixed numbers to improper fractions

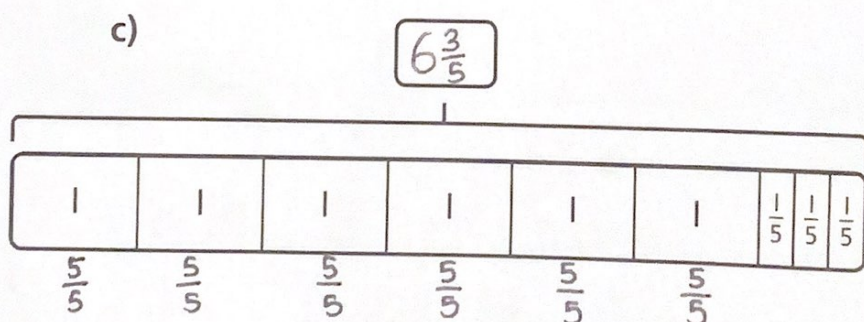
1 Convert the mixed numbers into improper fractions.



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

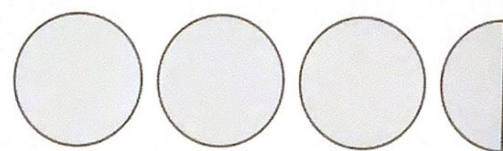


$$4\frac{1}{4} = \frac{17}{4}$$

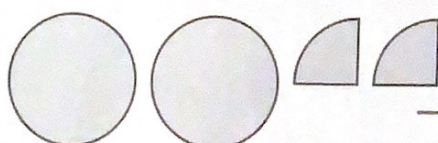
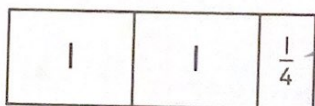


$$6\frac{3}{5} = \frac{33}{5}$$

2 Match each mixed number to the improper fraction.



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



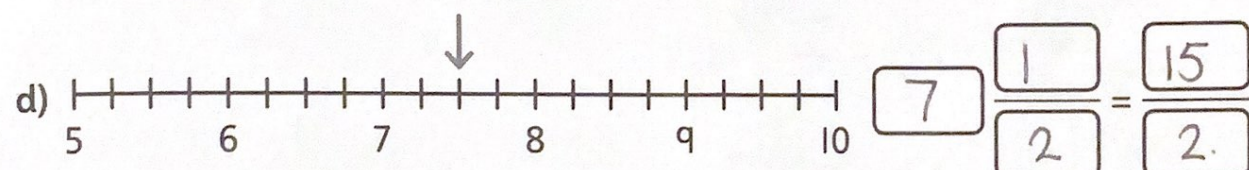
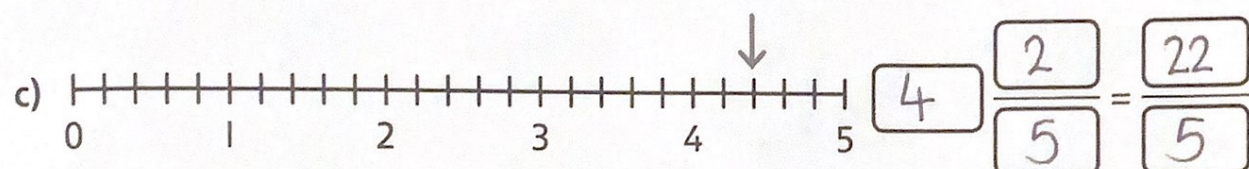
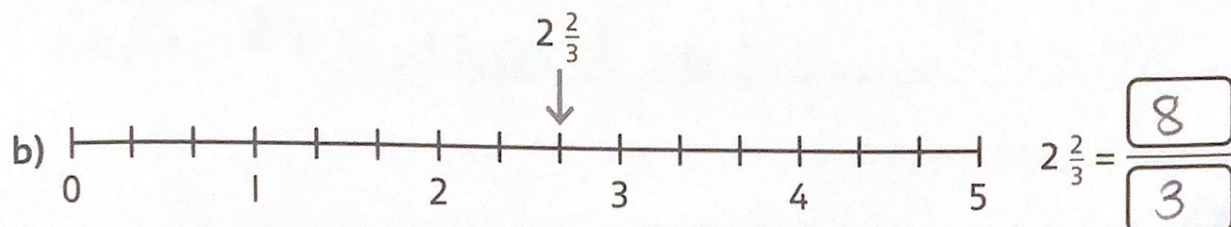
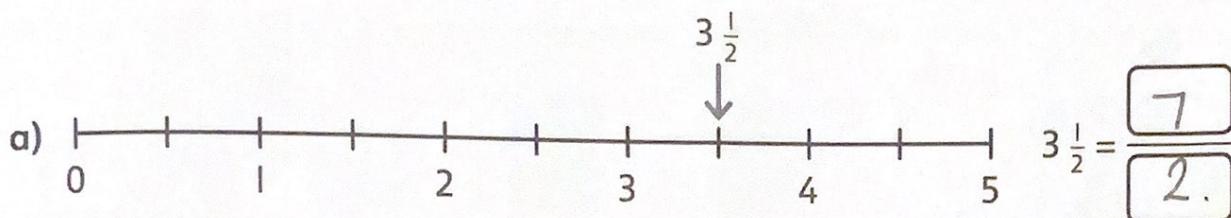
$$\frac{9}{4}$$

$$\frac{13}{4}$$

$$\frac{7}{2}$$

$$\frac{5}{2}$$

- 3 Write the improper fraction for each mixed number shown.



or $7\frac{2}{4} = \frac{30}{4}$

- 4 Convert the mixed numbers into improper fractions.

a) $4\frac{1}{5} = \frac{\boxed{21}}{\boxed{5}}$

b) $4\frac{2}{5} = \frac{\boxed{22}}{\boxed{5}}$

c) $4\frac{4}{5} = \frac{\boxed{24}}{\boxed{5}}$

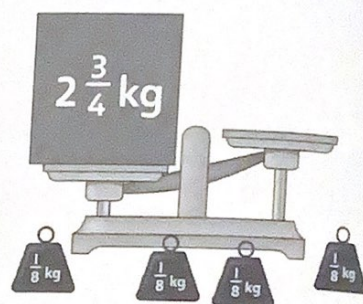
- 5 A waiter has $3\frac{1}{2}$ litres of juice. A glass holds $\frac{1}{4}$ of a litre. How many glasses can the waiter fill?

 $3\frac{1}{2} = \frac{7}{2} = \frac{14}{4} = 14 \text{ glasses can be filled.}$

(Handwritten work shows conversion from 7/2 to 14/4 by multiplying numerator and denominator by 2.)

- 6 How many $\frac{1}{8}$ kg weights would balance the box?

$2\frac{3}{4} = \frac{11}{4} = \frac{22}{8}$
 $2\frac{3}{4} = \frac{22}{8}$
 so 22 of the $\frac{1}{8}$ weights.



- 7 Complete the missing numbers.

a)

$$\frac{14}{4} = 3\frac{1}{2} \Rightarrow \frac{7}{2} = \frac{14}{4}$$

$$\frac{28}{8} = 3\frac{1}{2} = \frac{7}{2} = \frac{28}{8}$$

$$\frac{21}{6} = 3\frac{1}{2} = \frac{7}{2} = \frac{21}{6}$$

b)

$$4\frac{5}{10} = \frac{9}{2} = \frac{45}{10}$$

$$4\frac{6}{10} = \frac{23}{5} = \frac{46}{10}$$

$$4\frac{7}{10} = \frac{94}{20} = \frac{47}{10}$$

$$4\frac{8}{10} = \frac{72}{15} = \frac{48}{10}$$

$$\frac{24}{5} = 4\frac{4}{5}$$

CHALLENGE

Reflect

Draw a diagram to show why $2\frac{4}{5} = \frac{14}{5}$.