Seeing Double

Māni is using double number lines to change decimals to fractions.

Five out of 10 jellybeans in the bag are black. That's one-half.

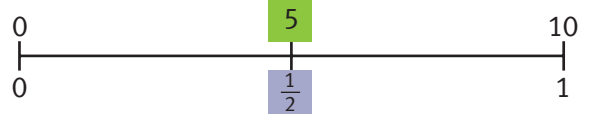He writes:

0 —————— 5 —————— 10
0 —————— $\frac{1}{2}$ —————— 1

So 0.5 = $\frac{5}{10}$

= $\frac{1}{2}$

75 out of the 100 pages in my magazine have photographs.

What is 0.75 as a fraction?

He writes:

0 —— 25 —— 50 —— 75 —— 100
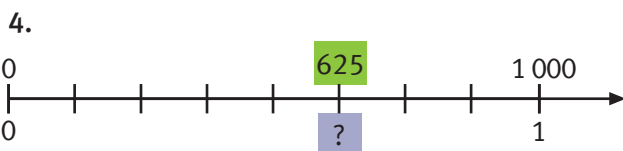0 —— $\frac{1}{4}$ —— $\frac{1}{2}$ —— $\frac{3}{4}$ —— 1

So 0.75 = $\frac{75}{100}$

= $\frac{3}{4}$
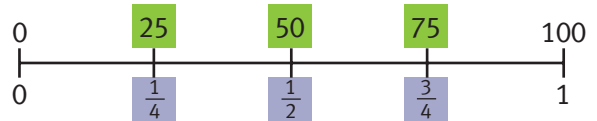
Use the double number lines below to work out the simplified fraction for each decimal shown.

1.

0 —— 25 —————————— 100
0 —— ? —————————— 1

2.

0 ———————— 6 ——— 10
0 ———————— ? ——— 1

3.

0 — 125 ———————— 1 000
0 — ? ———————— 1

4.

0 ————— 625 ———— 1 000
0 ————— ? ———— 1

5.

0 —— 10 —— 20 — 25 — 30
0 —— 1 —— 2 — ? — 3

6.

0 ———— 100 — 175 — 200
0 ———— 1 — ? — 2
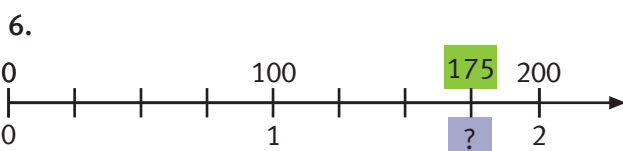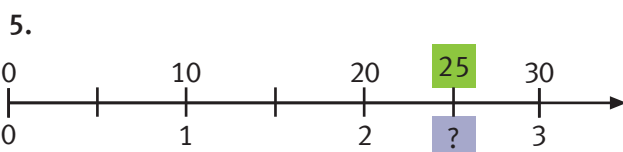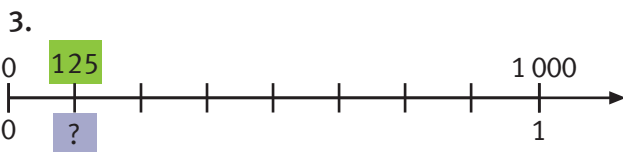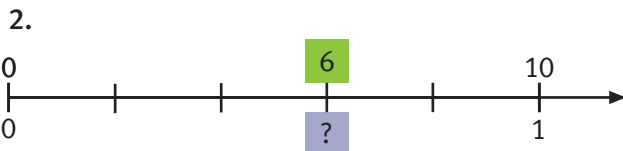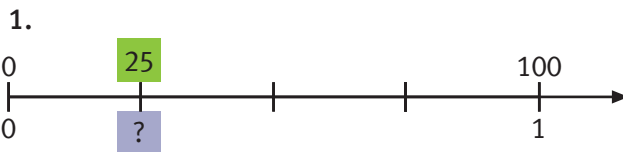
Decimal	Fraction	Simplified fraction
0.25	$\frac{25}{100}$	
0.6	$\frac{6}{10}$	
0.125	$\frac{125}{1\,000}$	
0.625	$\frac{625}{1\,000}$	
2.5	$\frac{25}{10}$	
1.75	$\frac{175}{100}$	