Decimals as fractions

1 Complete the sentences.
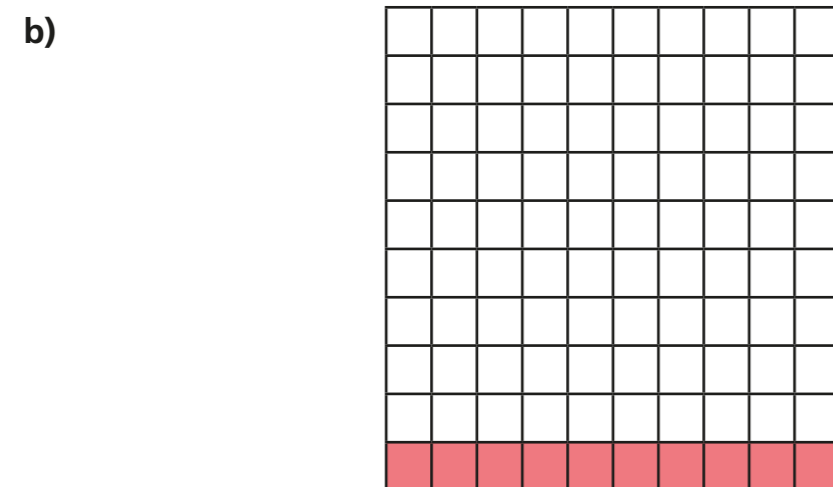
a)

0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

The whole has been divided into ☐ equal parts.

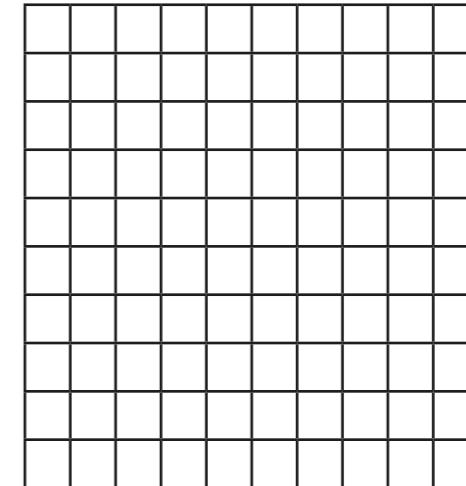Each part is worth ☐

This is equivalent to ☐

b)

The whole has been divided into ☐ equal parts.

Each part is worth ☐

☐ parts out of ☐ are shaded.

This is equivalent to ☐

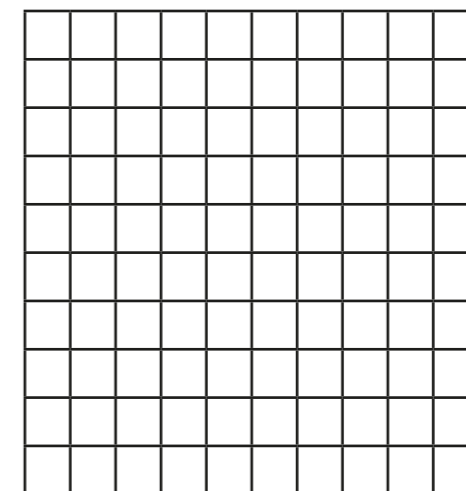**2** **a)** Shade 0.17 of the hundred square.

Complete the sentence.

☐ parts out of ☐ are shaded.

Write 0.17 as a fraction.

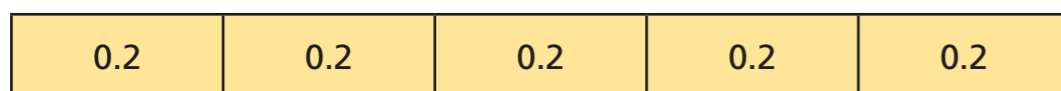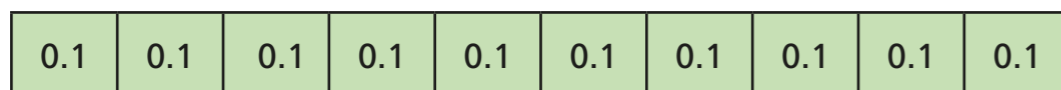0.17 = ☐

b) Shade 0.2 of the hundred square.

Complete the sentence.

☐ parts out of ☐ are shaded.

Write 0.2 as a fraction in its simplest form.

0.2 = ☐

3

| 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |

| 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |

Use the bar models to fill in the missing numbers.

$$0.2 = \frac{\boxed{}}{10} = \frac{1}{\boxed{}}$$

$$0.4 = \frac{\boxed{}}{10} = \frac{2}{\boxed{}}$$

$$\boxed{} = \frac{\boxed{}}{10} = \frac{4}{5}$$

4 Fill in the missing numbers.

a) $0.54 = \dfrac{\boxed{}}{100} = \dfrac{\boxed{}}{50}$

b) $0.6 = \dfrac{\boxed{}}{10} = \dfrac{\boxed{}}{5}$

c) $0.3 = \dfrac{\boxed{}}{10} = \dfrac{\boxed{}}{100}$

d) $\boxed{} = \dfrac{9}{100}$

e) $\boxed{} = \dfrac{9}{10}$

f) $\dfrac{21}{50} = \dfrac{\boxed{}}{100} = \boxed{}$

5 Use the bar models to fill in the missing numbers.

a)

$$\frac{1}{2} = \frac{\boxed{}}{10} = \boxed{}$$

b)

$$\boxed{} = \frac{\boxed{}}{10} = \frac{\boxed{}}{20}$$
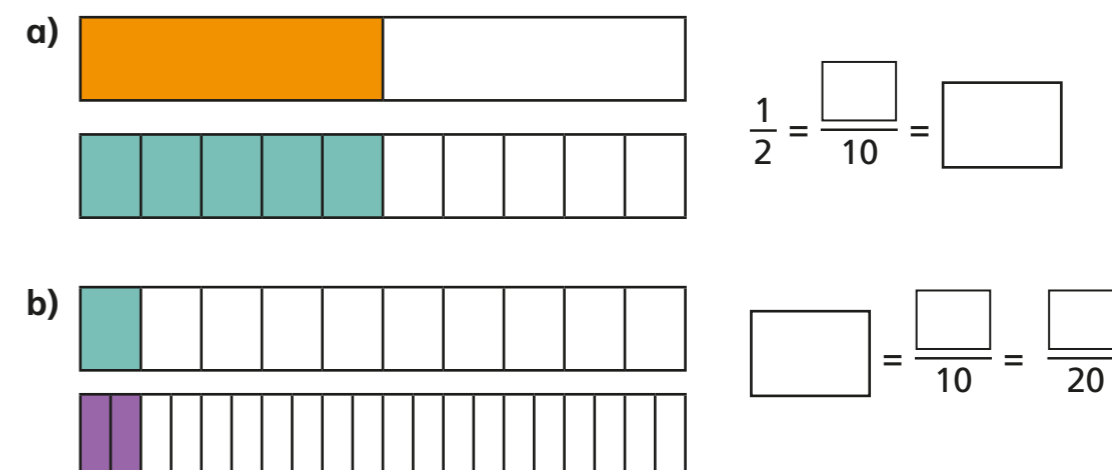
6
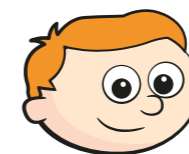
$0.3 = \dfrac{3}{10}$ so $0.37 = \dfrac{37}{10}$

Draw a diagram to show that Ron is wrong.