Decimals as fractions

1 Complete the sentences.
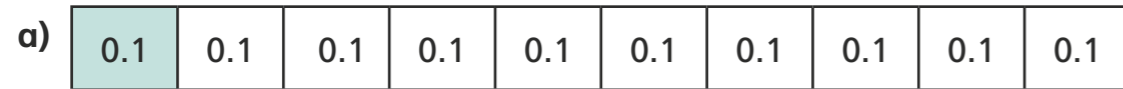
a)

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 $\boxed{10}$ equal parts.

Each part is worth $\boxed{0 \cdot 1}$

This is equivalent to $\boxed{\dfrac{1}{10}}$

b)
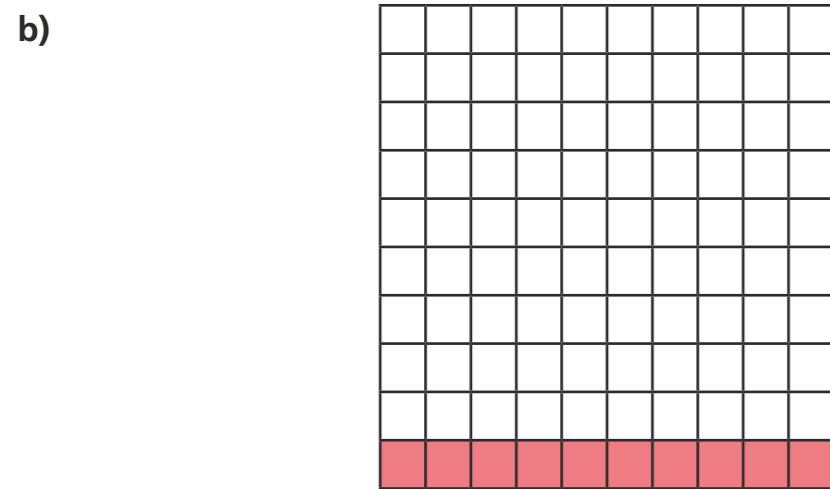
The whole has been divided into $\boxed{100}$ equal parts.

Each part is worth $\boxed{0 \cdot 01}$

$\boxed{10}$ parts out of $\boxed{100}$ are shaded.

This is equivalent to $\boxed{\dfrac{10}{100}}$ or $\dfrac{1}{10}$

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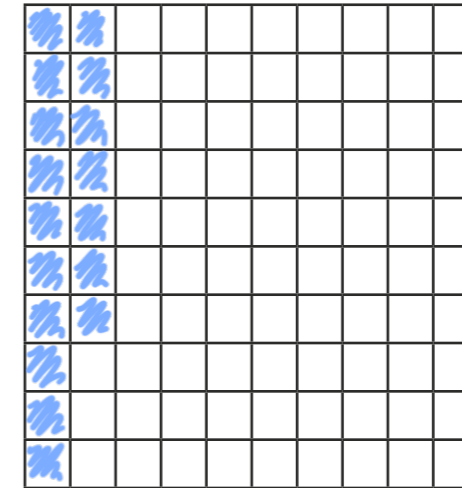
Complete the sentence.

$\boxed{17}$ parts out of $\boxed{100}$ are shaded.

Write 0.17 as a fraction.

$0.17 = \boxed{\dfrac{17}{100}}$

b) Shade 0.2 of the hundred square.
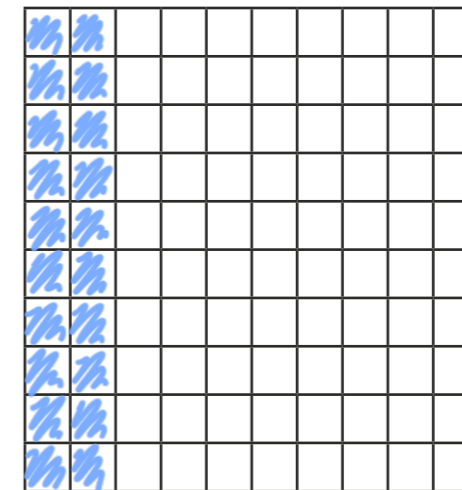
Complete the sentence.

$\boxed{20}$ parts out of $\boxed{100}$ are shaded.

Write 0.2 as a fraction in its simplest form.

$0.2 = \boxed{\dfrac{1}{5}}$

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
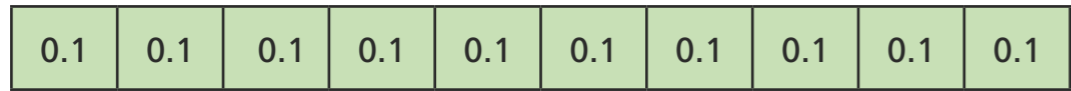
Use the bar models to fill in the missing numbers.

$0.2 = \dfrac{\boxed{2}}{10} = \dfrac{1}{\boxed{5}}$

$0.4 = \dfrac{\boxed{4}}{10} = \dfrac{2}{\boxed{5}}$

$\boxed{0.8} = \dfrac{\boxed{8}}{10} = \dfrac{4}{5}$

4 Fill in the missing numbers.

a) $0.54 = \dfrac{\boxed{54}}{100} = \dfrac{\boxed{27}}{50}$

b) $0.6 = \dfrac{\boxed{6}}{10} = \dfrac{\boxed{3}}{5}$

c) $0.3 = \dfrac{\boxed{3}}{10} = \dfrac{\boxed{30}}{100}$

d) $\boxed{0.09} = \dfrac{9}{100}$

e) $\boxed{0.9} = \dfrac{9}{10}$

f) $\dfrac{21}{50} = \dfrac{\boxed{42}}{100} = \boxed{0.42}$

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

a)

$\dfrac{1}{2} = \dfrac{\boxed{5}}{10} = \boxed{0.5}$

b)

$\boxed{0.1} = \dfrac{\boxed{1}}{10} = \dfrac{\boxed{2}}{20}$
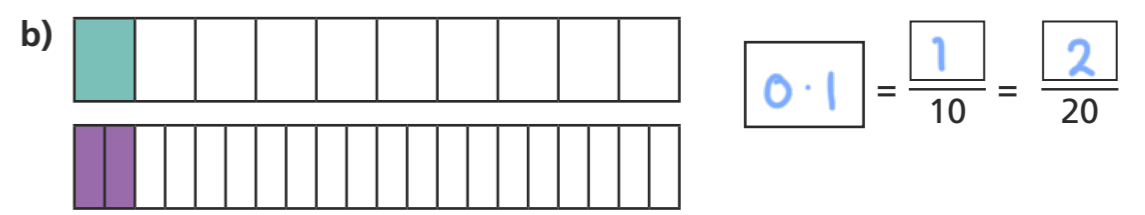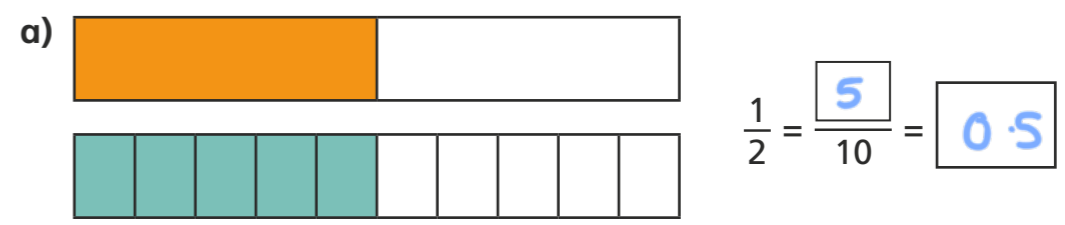
6
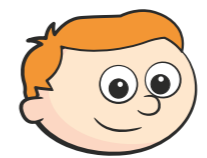
$0.3 = \dfrac{3}{10}$ so $0.37 = \dfrac{37}{10}$

Draw a diagram to show that Ron is wrong.

$0.3 = \dfrac{3}{10}$

$0.37 = \dfrac{37}{100}$