Convert between fractions and decimals – tenths and hundredths

1

a) Shade $\dfrac{2}{10}$ of a hundred square.

b) Shade $\dfrac{20}{100}$ of a hundred square.

c) Complete the equivalent fractions.

$$\dfrac{2}{10} = \dfrac{\boxed{}}{100} \qquad 0.2 = \dfrac{\boxed{}}{10} \qquad 0.2 = \dfrac{\boxed{}}{100}$$

2 Complete the statements.

a) $\dfrac{8}{10} = \dfrac{\boxed{}}{100}$

b) $\dfrac{70}{100} = \dfrac{\boxed{}}{10}$

c) $0.5 = \dfrac{\boxed{}}{10}$

d) $\dfrac{17}{100} = 0.\_\_\,\_\_$

e) $0.37 = \dfrac{\boxed{}}{100}$

f) $0.03 = \dfrac{\boxed{}}{100}$

3 Part of a grid is shaded.

a) What fraction of each grid is shaded?
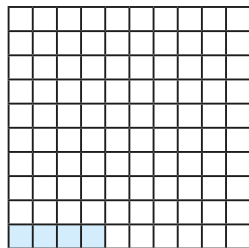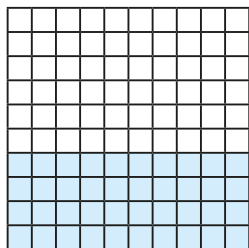
b) Use your answers to part a) to explain why 0.4 is greater than 0.04

4 Write <, > or = to complete the statements.

a) $0.6 \bigcirc \dfrac{6}{100}$

b) $\dfrac{9}{10} \bigcirc 0.9$

c) $0.7 \bigcirc \dfrac{70}{10}$

d) $0.79 \bigcirc \dfrac{79}{100}$

e) $\dfrac{15}{100} \bigcirc 0.2$

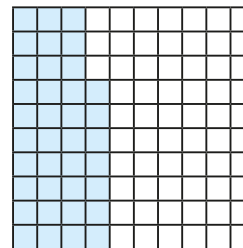**f)** $\dfrac{29}{100} \bigcirc \dfrac{3}{10}$

5 Write the next three terms in each linear sequence.

a) $\dfrac{1}{10}, \dfrac{11}{100}, \dfrac{12}{100}$

b) $\dfrac{35}{100}, \dfrac{5}{10}, \dfrac{65}{100}$

c) $\dfrac{4}{10}, 0.29$

6

Use the diagram to explain why $\dfrac{37}{100} = \dfrac{3}{10} + \dfrac{7}{100}$

4 Write <, > or = to complete the statements.

a) 0.6 ◯ $\frac{6}{100}$

b) $\frac{9}{10}$ ◯ 0.9

c) 0.7 ◯ $\frac{70}{10}$

d) 0.79 ◯ $\frac{79}{100}$

e) $\frac{15}{100}$ ◯ 0.2

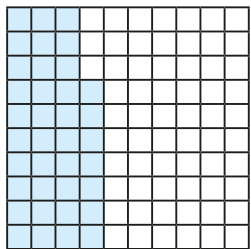f) $\frac{29}{100}$ ◯ $\frac{3}{10}$

5 Write the next three terms in each linear sequence.

a) $\frac{1}{10}$, $\frac{11}{100}$, $\frac{12}{100}$

b) $\frac{35}{100}$, $\frac{5}{10}$, $\frac{65}{100}$

c) $\frac{4}{10}$, 0.29

6

Use the diagram to explain why $\frac{37}{100} = \frac{3}{10} + \frac{7}{100}$

7

There are no tenths in $\frac{42}{100}$ because the denominator is 100, not 10

Explain to a partner why Amir is not correct.

You can use a hundred square to help you.

8 a) Write a digit to make the statement correct.

$\frac{37}{100} < 0.\_9$

b) Is there more than one possible answer? Record all the possibilities.

9 Complete the calculations.

You may use a hundred square to help you.

Give your answers as fractions.

a) $\frac{3}{10} - \frac{20}{100} = \dfrac{\boxed{}}{10}$

b) $1 - \frac{91}{100} = \boxed{}$

c) $\frac{5}{10} - 0.17 = \boxed{}$

10 Complete the number sentence in three different ways.

$\frac{49}{100} + \dfrac{\boxed{}}{10} + 0.3 + 0.\_\ \_ = 2$

Compare answers with a partner.

Can you find another way?