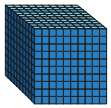
# Understand thousandths

**1** Tommy is using base 10 to represent decimals.

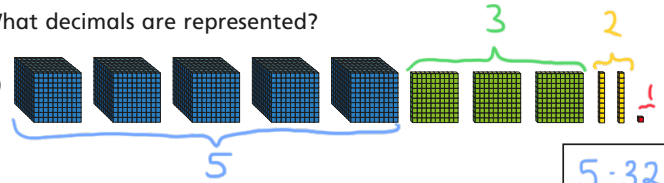
He uses  to represent 1 whole.

He uses  to represent $\frac{1}{10}$ or 0.1

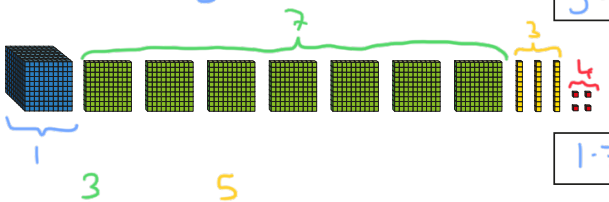
He uses  to represent $\frac{1}{100}$ or 0.01

He uses  to represent $\frac{1}{1000}$ or 0.01

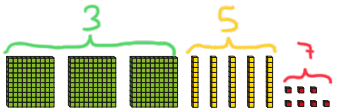
What decimals are represented?

**a)** 

5·321

**b)** 

1·734

**c)** 

0·357

**2** **a)** Represent each number using base 10

0.512 1.352 2.003

**b)** Use your representations to help you complete the statements.

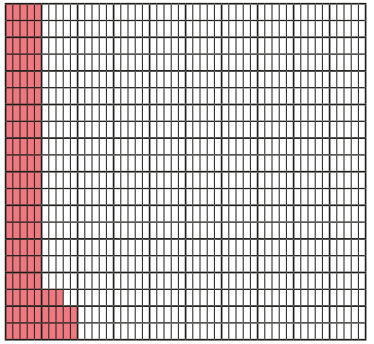
0.512 = 0.5 + 0.01 + 0·002

1.352 = 1 + 0·3 + 0·05 + 0·002

2.003 = 2 + 0·003

**3** Here is a thousand square.

Part of the square has been coloured.



**a)** Why do you think it is called a thousand square?

It is split into one thousand equal parts.

**b)** What fraction of the square has been coloured?

$\frac{113}{1000}$

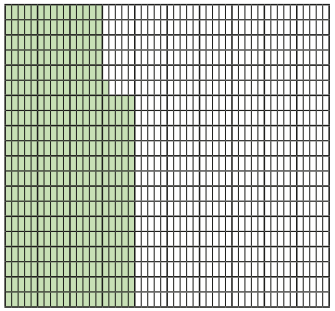
**c)** Write the fraction as a decimal.

0·113

**4** What fraction of each square has been shaded?

Write each number as a fraction and as a decimal.

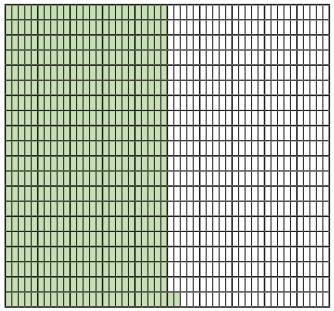
**a)**



fraction = $\frac{371}{1000}$

decimal = 0·371

**b)**

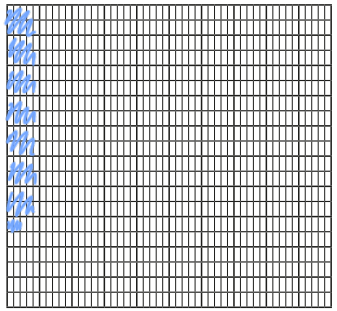


fraction = $\frac{502}{1000}$

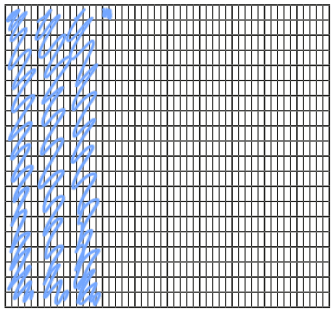
decimal = 0·502

**5** Colour the grids to represent the fraction and decimal.

**a)** $\frac{73}{1000}$



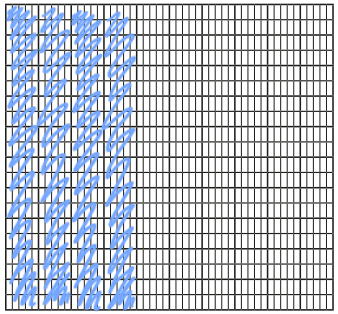
**b)** 0.302



**6** Represent these numbers on a place value chart.

**a)** 1.372 **b)** 0.091 **c)** 3.542

**7** Show that $\frac{400}{1000}$ is the same as 0.4



400 out of 1,000 equal parts = $\frac{400}{1000}$

4 out of 10 equal columns = $\frac{4}{10} = 0.4$

**8** Write the numbers represented by the place value charts.

**a)**

| Ones | Tenths | Hundredths | Thousandths |
|---|---|---|---|
| 1 1 1 1 | 0.1 0.1 | 0.01 0.01 0.01 0.01 0.01 0.01 0.01 | 0.001 0.001 0.001 0.001 0.001 0.001 |

4·276

**b)**

| Ones | Tenths | Hundredths | Thousandths |
|---|---|---|---|
| | 0.1 0.1 0.1 0.1 0.1 | | 0.001 0.001 0.001 0.001 |

0·504