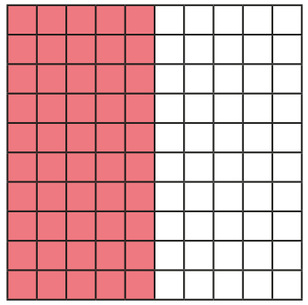
Halves and quarters as decimals

White Rose MATHS

1 Half of the hundred square is shaded.



a) How many hundredths are shaded? ☐

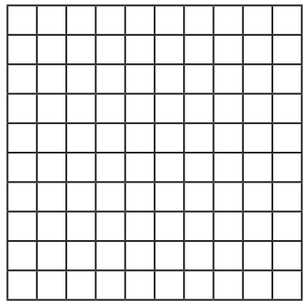
b) How many tenths are shaded? ☐

c) Complete the equivalent fractions.

$\frac{1}{2} = \frac{\square}{100}$ $\frac{1}{2} = \frac{\square}{10}$

d) Write $\frac{1}{2}$ as a decimal. ☐

2 Here is a blank hundred square.



a) Shade $\frac{1}{4}$

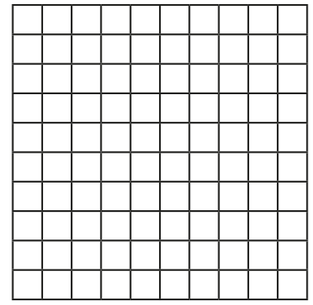
b) How many hundredths are shaded? ☐

c) Complete the equivalent fraction.

$\frac{1}{4} = \frac{\square}{100}$

d) Write $\frac{1}{4}$ as a decimal. ☐

3 Here is a blank hundred square.



a) Shade $\frac{3}{4}$

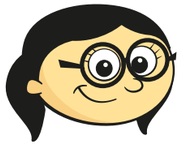
b) How many hundredths are shaded? ☐

c) Complete the equivalent fraction.

$\frac{3}{4} = \frac{\square}{100}$

d) Write $\frac{3}{4}$ as a decimal. ☐

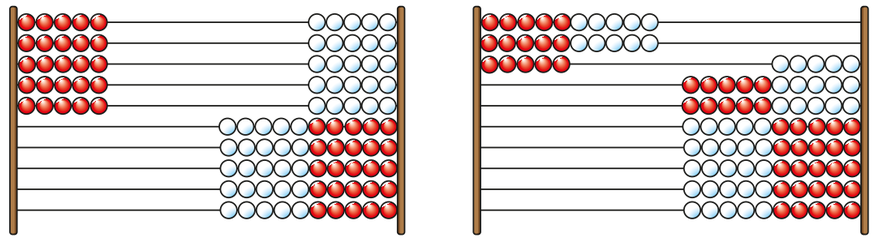
4



I do not need to shade a hundred square to write $\frac{3}{4}$ as a decimal because I already know what $\frac{1}{2}$ and $\frac{1}{4}$ are as decimals.

How does this help Annie?

5

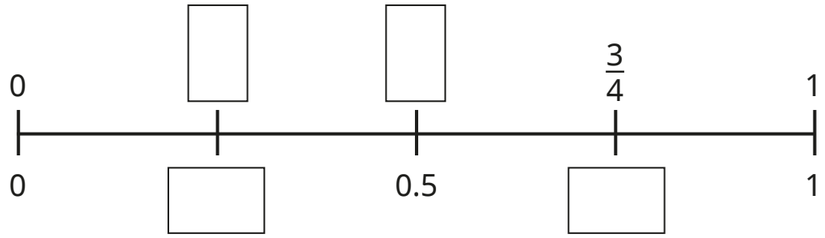


Both Rekenreks represent one quarter.

Is the statement true or false? _____

Talk about it with a partner.

6 Fill in the missing fractions and decimals on the number line.



7 Complete the equivalent fractions and decimals.

a) $\frac{25}{100} = \square$

b) $\frac{75}{100} = \square$

c) $\frac{1}{4} = \square$

d) $\frac{3}{4} = \square$

e) $\frac{25}{100} = \frac{\square}{4}$

f) $\frac{\square}{4} = \frac{75}{100}$

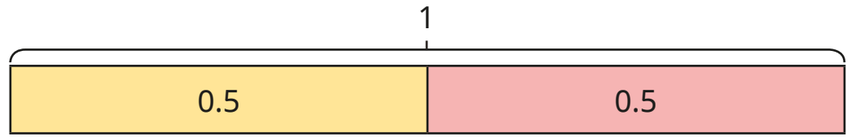
g) $\frac{\square}{} = \frac{1}{2}$

h) $\frac{50}{100} = \frac{\square}{2}$

8

0.5 + 0.5 = 1

This bar model shows that $\frac{1}{2}$ is equivalent to 0.5



Draw a bar model to show that $\frac{1}{4}$ is equivalent to 0.25

9 Use your knowledge of equivalent fractions to convert between fractions and decimals.

a) $\frac{2}{4} = \square$

b) $\frac{5}{20} = \square$

c) $\square = \frac{21}{28}$

d) $0.25 = \frac{\square}{24}$

e) $\frac{\square}{68} = 0.5$

f) $0.75 = \frac{\square}{400}$