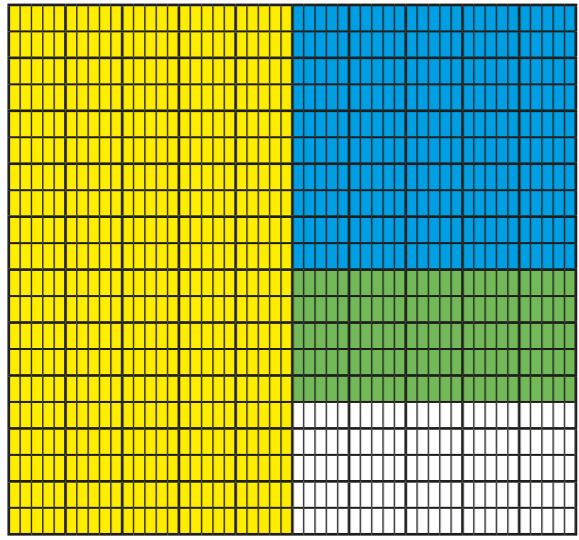


Convert between fractions and decimals – eighths and thousandths

H



1 Use the thousand square to complete the equivalent fractions.



a) $\frac{1}{2} = \frac{\square}{1000}$ b) $\frac{1}{4} = \frac{\square}{1000}$ c) $\frac{1}{8} = \frac{\square}{1000}$

d) Use your answer to part c) to write $\frac{1}{8}$ as a decimal.
Discuss any patterns you spot with a partner.

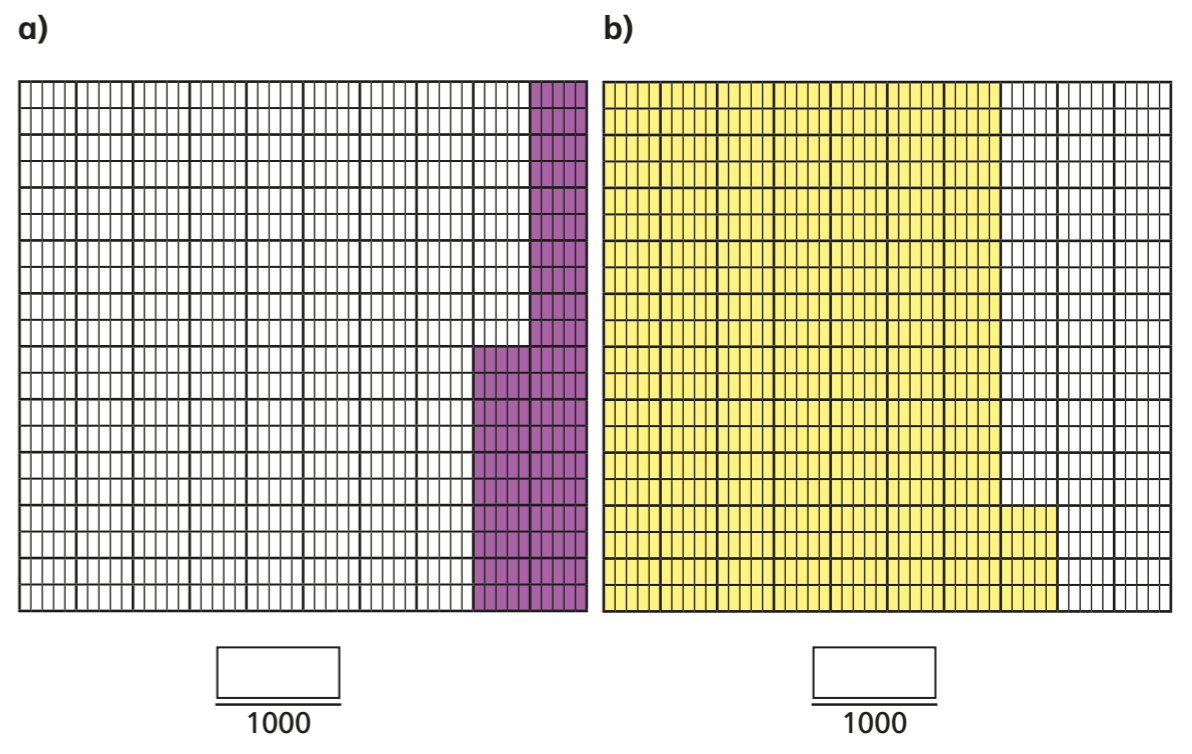
2 Complete the statements.

a) $\frac{1}{4}$ is a half of $\frac{1}{2}$ so $\frac{1}{8}$ is _____ of $\frac{1}{4}$

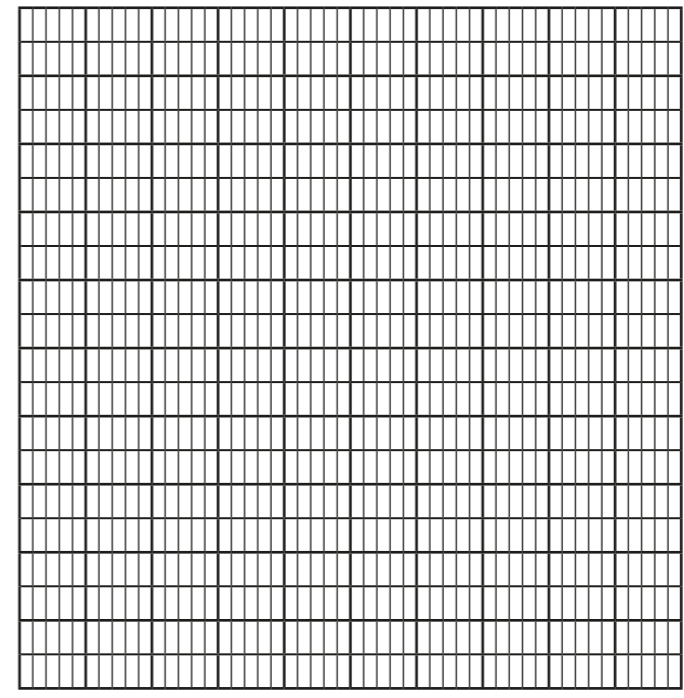
b) $0.25 = \frac{\square}{4}$ c) $0.75 = \frac{\square}{4}$

$0.25 = \frac{\square}{8}$ $0.75 = \frac{\square}{8}$

3 What fraction of the thousand square is shaded?



4 Use the thousand square to help you.



a) How many thousandths are equal to two-hundredths?

b) How many thousandths are equal to $\frac{2}{10}$?



5 Complete the statements.

a) $\frac{300}{1000} = \frac{\square}{100} = \frac{\square}{10} = 0.__$

b) $\frac{800}{1000} = \frac{\square}{100} = \frac{\square}{10} = \frac{\square}{5} = 0.__$

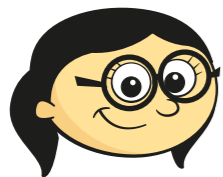
c) $\frac{480}{1000} = \frac{\square}{100} = 0.__ __$

e) $0.6 = \frac{\square}{10} = \frac{\square}{100} = \frac{\square}{1000}$

d) $\frac{389}{1000} = 0.__ __ __$

f) $0.67 = \frac{\square}{100} = \frac{\square}{1000}$

6 Annie is trying to work out $\frac{3}{8}$ as a decimal.



$\frac{3}{8}$ is equal to $\frac{375}{1000}$,
which is 375

Explain and correct Annie's error.

7 Given that $\frac{1}{8} = 0.125$, complete the table.

Fraction	$\frac{2}{8}$	$\frac{3}{8}$	$\frac{5}{8}$	$\frac{10}{8}$	$\frac{11}{8}$
Decimal					

8 Write the fractions in descending order.

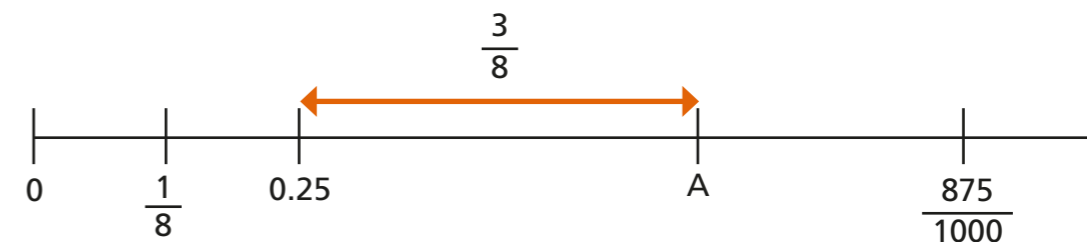
$\frac{3}{5}$

$\frac{4}{10}$

$\frac{5}{8}$

$\frac{71}{100}$

9



a) What is the fraction at point A?

b) Label $\frac{6}{8}$ in approximately the correct place on the number line.

10 a) Circle all the fractions that cannot be simplified to quarters.

$\frac{1}{8}$ $\frac{2}{8}$ $\frac{3}{8}$ $\frac{4}{8}$ $\frac{5}{8}$ $\frac{6}{8}$ $\frac{7}{8}$ $\frac{8}{8}$

b) What do you notice about all of the circled fractions?
