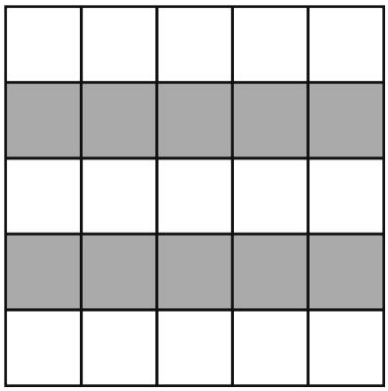
MODERN ENGLISH SCHOOL MES المدرسة الانجليزية الحديثة

Department of Mathematics
Fifth grade
Fractions and percentages

Worksheet

1 This square is divided into smaller squares.



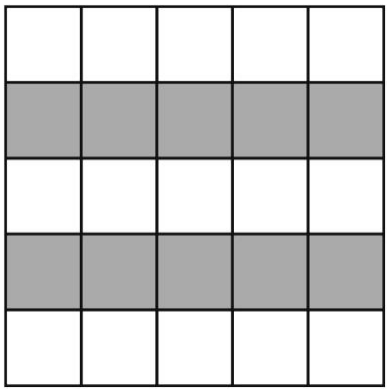
a Write the percentage of the square that is shaded.

$$\frac{\square}{\square} = \frac{\square}{100} = \square\%$$

_____40%_____

Tip: You could start by counting the total number of squares and the number of squares that are shaded.

2 This square is divided into smaller squares.



a. Write the percentage of the square that is shaded.__40%_____

b Write the percentage as a fraction in its lowest terms. _____$\frac{2}{5}$_____

3 Simplify these fractions.

a $\frac{30}{100}$ b $\frac{16}{20}$ c $\frac{7}{28}$ d $\frac{12}{24}$

$\frac{3}{10}$ $\frac{4}{5}$ $\frac{1}{7}$ $\frac{1}{2}$

Tip: Remember to look for a number that divides into the numerator and the denominator of the fraction.

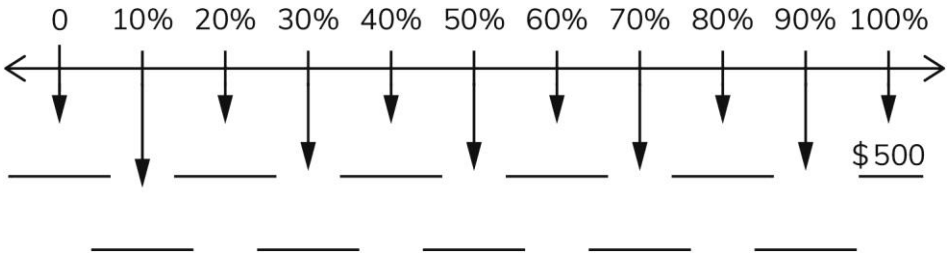
4 Write these fractions in order of size. Start with the smallest fraction.

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

Tip: It could be useful to find equivalent fractions with the same denominator.

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

5 Find 10% of the quantity, then use your answer to find 20%, 30% and so on. Write the answers under the percentages on the number line.



0 50 100 150 200 250 300 350 400 450 $500

Tip: Find 10% of $500 by dividing 500 by 10. Use that answer to find all the other answers.

6 Write these numbers in order of size, starting with the smallest.

$\frac{1}{4}$ 0.14 41% $\frac{2}{5}$ 0.26

Tip: Write $\frac{1}{4}$ and $\frac{2}{5}$ as equivalent decimals or percentages.

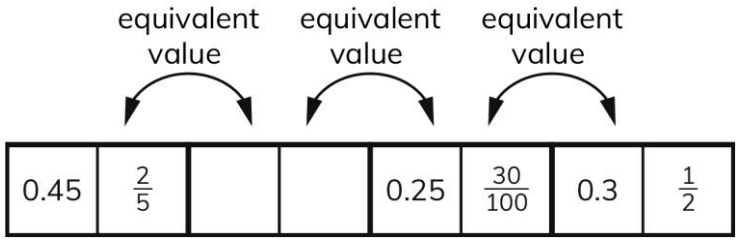
0.14 , $\frac{1}{4}$, 0.26 , $\frac{2}{5}$, 0.41%

7 Use the symbols <, > or = to make each statement correct.

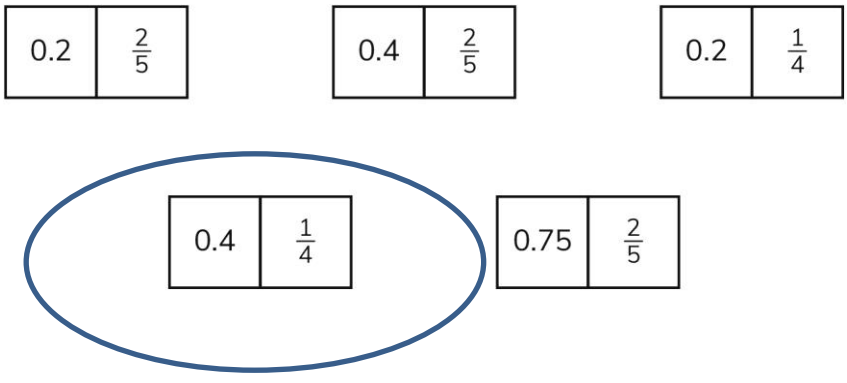
$\frac{9}{10}$ [>] 0.09 $\frac{3}{50}$ [=] 6% $\frac{57}{1000}$ [<] 0.57

8 Four dominoes are placed in a row.

The numbers on one domino are missing.



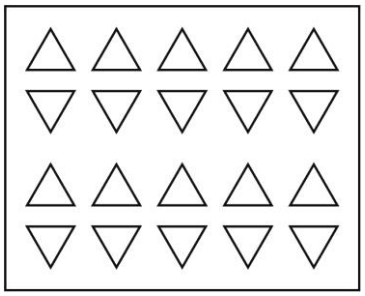
Draw a ring around the missing domino.



Hyacinth draws a pattern of triangles.

She colours 70% of the triangles.

How many triangles does she colour?



_____14_____

9 Here are three statements about fractions and percentages.

Tick (✓) the statements that are correct.

Cross (✖) the statements that are incorrect and write the correct statement.

a $\frac{1}{100}$ is equal to 1% ✓ _____

10 $\frac{4}{5}$ is equal to 45% ✖ _____

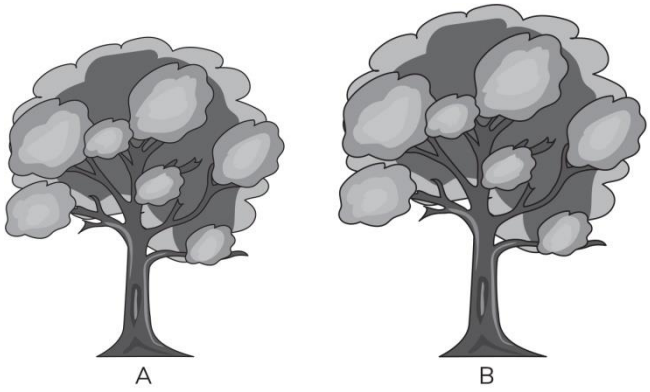
11 $\frac{5}{10}$ is equal to 5% ✖ _____

12 Here are two apple trees.

Tree A produces 40 kg of apples.

Tree B produces 50% more than tree A.

How many kilograms of apples does tree B produce?



____40 +20 = 60 Kg_____

1 Look at the fraction and circle True or False.

$$\frac{7}{4}$$

b The numerator is four. True False

2 The denominator is four. True False

3 This is a proper fraction. True False

4 You could express this as a mixed number $1\frac{3}{4}$. True False

5 This is an improper fraction. True False

6 This fraction is greater than 2. True False

7 This fraction is less than $\frac{8}{4}$. True False

8 $\frac{14}{8}$ is equivalent to this fraction. True False

Complete the table .

Question	Number	10%	20%	5%
a.	**240**	**24**	**48**	**12**
b.	**520**	**52**	**104**	**26**
c.	**2600**	**260**	**520**	**130**
d.	**780**	**78**	**156**	**39**
e.	**60**	**6**	**12**	**3**
f.	**90**	**9**	**18**	**4.5**

Find 240 increased by 10%

10% of 240 = _24__

240 + _24__ = __264__

Find 60 decreased by 20%

20% of 60 = __12___

60 - _12_ = _48__