



Maths Home Learning Task
Year 9 sets 3, 4 and 5
Foundation 1

Name

Tutor Group

Teacher

Given out: Monday 7 October Hand in: Monday 14 October

Parent/Carer Comment

Staff Comment

ATL

Target

Instructions

It is important to complete as many of the tasks as you can. When you sit a GCSE exam you are graded on the amount of marks you score in total. Give them a go, you never know where you may pick up extra marks for trying.

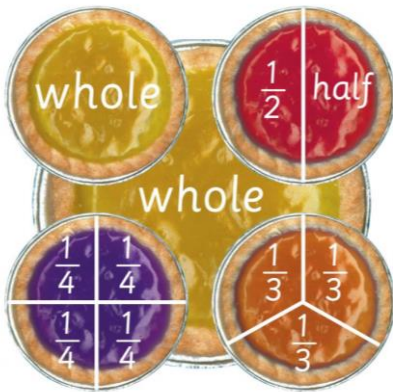
hundred millions	ten millions	millions	hundred thousands	ten thousands	thousands	hundreds	tens	units	• decimal	tenths	hundredths	thousandths	ten thousandths

$$0.3 \times 2.13 = 0.639$$



$$\begin{array}{r}
 2.13 \leftarrow 2 \\
 \times 0.3 \leftarrow +1 \\
 \hline
 0.639 \leftarrow 3 \\
 \hline
 327
 \end{array}$$

decimals



$$\begin{aligned}
 & \frac{24}{40} \div 2 = \frac{12}{20} \\
 \text{or} & \frac{24}{40} \div 4 = \frac{6}{10} \\
 \text{or} & \frac{24}{40} \div 8 = \frac{3}{5}
 \end{aligned}$$

- (a) $\frac{2}{5} = \frac{4}{10} = 0.4$
- (b) $\frac{3}{50} = \frac{6}{100} = 0.06$
- (c) $\frac{6}{25} = \frac{24}{100} = 0.24$
- (d) $\frac{5}{4} = \frac{125}{100} = 1.25$
- (e) $\frac{7}{250} = \frac{28}{1000} = 0.028$

Converting fractions to decimals

Remember

My Maths: Number \longrightarrow

Homework Club: Tuesdays to Thursdays after school in the Library.

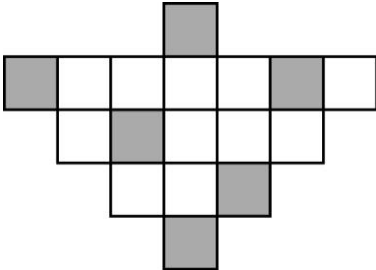
ASK your teacher.

Fractions

1 a. What fraction of this shape is shaded? a

b

b. What fraction is not shaded?



$\frac{1}{12}$	$\frac{2}{12}$	$\frac{3}{12}$	$\frac{4}{12}$	$\frac{5}{12}$	$\frac{6}{12}$	$\frac{7}{12}$	$\frac{8}{12}$	$\frac{9}{12}$	$\frac{10}{12}$	$\frac{11}{12}$	$\frac{12}{12}$
$\frac{1}{6}$		$\frac{2}{6}$		$\frac{3}{6}$		$\frac{4}{6}$		$\frac{5}{6}$		$\frac{6}{6}$	
$\frac{1}{3}$				$\frac{2}{3}$				$\frac{3}{3}$			

2. Use this diagram to complete these equivalent fraction statements.

a $\frac{4}{6} = \frac{\quad}{12}$

b $\frac{\quad}{6} = \frac{1}{3}$

c $\frac{\quad}{12} = \frac{\quad}{6} = \frac{\quad}{3} = 1$

3 The usual price of a television is £240. The price is reduced in the sale by $\frac{1}{5}$.

What is the sale price of the television? .£.....

4. In a sale the price of a caravan was reduced by £800 from £12 000.

a What fraction reduction is this?

b What fraction of the original price is the sale price?

Decimals

1 Work these out without a calculator. Please show your working using the column method.

a $14.8 + 5.1$

b $8.92 - 5.17$

c $5.28 - 4.73 + 3.85$

2 **Estimate** the answers to these calculations by rounding to one significant figure.

a $3.9 + 4.3$

b $186.4 + 102.3$

c $7.85 + 10.4 - 5.9$

3 Work out the following.

a 0.3×0.3

b 0.03×0.2

c $3 \times 0.5 \times 0.4$

4 For each question, decide which is the best **estimate**. Circle or highlight the correct answer.

		Estimate A	Estimate B	Estimate C
a	2.9×4.8	1.5	12	15
b	3.79×8.4	3.2	32	24
c	1.8×38.6	80	8	800
d	14.7×9.8	140	150	1500
e	32.6×7.3	210	280	320

8 Change these fractions to decimals.

a $\frac{1}{2}$

b $\frac{21}{50}$

c $\frac{3}{5}$

9 Write these decimals as fractions.

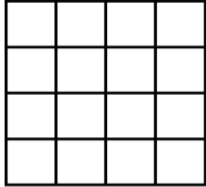
a 0.4

b 0.42

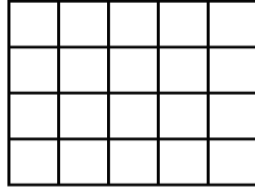
c 0.062

Percentages

1 Shade in the given percentage.



a 25%



b 80%

2 Change each decimal to a percentage.

a 0.25

b 0.07

c 0.02

3 Change each percentage to a decimal.

a 20%

b 90%

c 46%

4 Change each fraction to a percentage.

a $\frac{31}{100}$

b $\frac{3}{10}$

c $\frac{2}{5}$

5 Change each percentage to a fraction. Give each fraction in its simplest form.

a 27%

b 48%

c 4%

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

$\frac{2}{5}$

0.35

39%

Negative numbers

Put these temperatures in order from lowest to highest.

a) -1°C , 3°C , -4°C , 1°C , 0°C

b) 34°C , -62°C , 12°C , -1°C ,

Here is a list of numbers: **-7, 5, -2, 0 -17** .

a) Which of these numbers are greater than 4?

b) Which of these numbers are less than -1?.....

Find the value of:

a) $-3 + 6 = \dots\dots\dots$

b) $2 + -5 = \dots\dots\dots$

c) $-5 + -3 = \dots\dots\dots$

Find the missing number in the following:

a) $-5 + \dots\dots = -1$

b) $-4 - \dots\dots = 0$

c) $4 - -3 = \dots\dots$

Find the next 3 numbers in the pattern.

a) 6, 4, 2, 0,,,

b) -11, -9, -7,,,

Three whole numbers have the sum of 10, one of the numbers is 14, what are the other two?

a) $14 + \dots\dots + \dots\dots = 10$

b) $14 + \dots\dots + \dots\dots = 10$

Find the value of :

a) $5 \times \dots\dots = -20$

b) $24 \div \dots\dots = -8$

c) $-4 \times \dots\dots = 0$

