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Mathematics Department Homework Pack

Year 7 Module 3 Foundation

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Name

Class Teacher

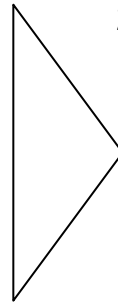
Name

Fractions

$\frac{\dots}{20} \times 100 = \dots\%$

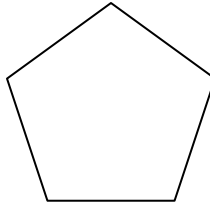
1. a. Draw a line so you cut this shape in **half**

[1]



b. Cut this shape into **fifths**

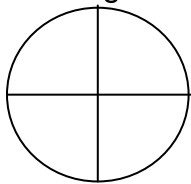
[1]



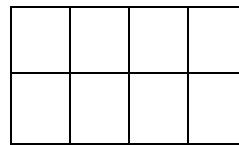
2. Shade the following correctly

[4]

a. $\frac{1}{4}$



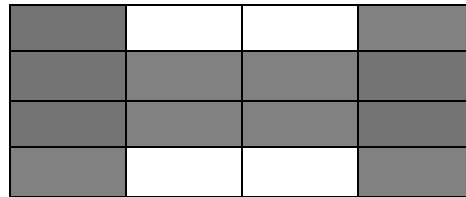
b. $\frac{5}{8}$



3. What fraction of the following shape

a. is shaded [2]

b. is **not** shaded [2]



4. Find

a. $\frac{1}{2}$ of £12 [1]

c. $\frac{1}{2}$ of £24 [1]

b. $\frac{1}{4}$ of £40 [1]

d. $\frac{1}{3}$ of £30 [1]

5. Fill in the following table

[6]

Fraction	Decimal	Percentage
$\frac{3}{4}$	0.75
$\frac{1}{4}$	25%
.....	0.5	50%

To improve I need to

Name

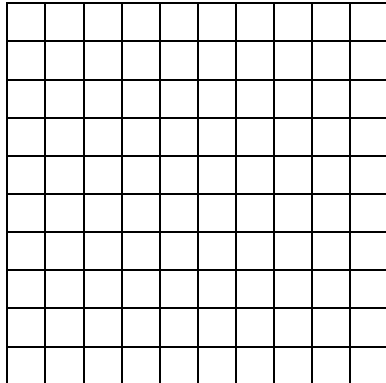
Percentages

$$\frac{\dots}{25} \times 100 = \dots\%$$

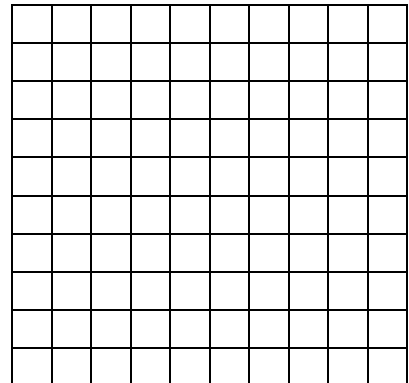
6. Shade the following correctly

[4]

a. 25%



b. 17%



7. Write the following fractions as a percentage

[6]

a. $\frac{40}{100}$ %

b. $\frac{76}{100}$ %

c. $\frac{6}{100}$ %

8. Write the following decimals as percentages

[6]

a. 0.40%

b. 0.07%

c. 0.3%

9. 20% of pupils in 7C were **absent** on Monday .

Write what percentage were **present**

[1]

10. Find

[8]

a. 50% of 60cm

c. 10% of 80kg

b. 50% of £48

d. 10% of 430m

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Name

Algebra

$\frac{\dots}{20} \times 100 = \dots\%$

1. Simplify

a. $4a + 5a$

[1]

d. $4a + 6a - a$

[1]

b. $7a + a$

[1]

e. $8a + 2a + 5b + 2b$

[2]

c. $2a + 5a - 3a$ [1]

f. $3a + 6a + 6b - 3b$ [2]

2. Use the following values and substitute into the expressions.

$a = 4$

$b = 3$

$c = 2$

a. $a + b$

.....
.....

d. $5b$

.....
.....

b. $a - b$

.....
.....

e. $2a + 4b$

.....
.....

c. $3a$

.....
.....

f. $4c - b + a$

.....
.....

[12]

To improve I need to

Name

Coordinates

$$\frac{\dots}{20} \times 100 = \dots\%$$

1. Write down the coordinates of A, B and C

A(.....,) [2]

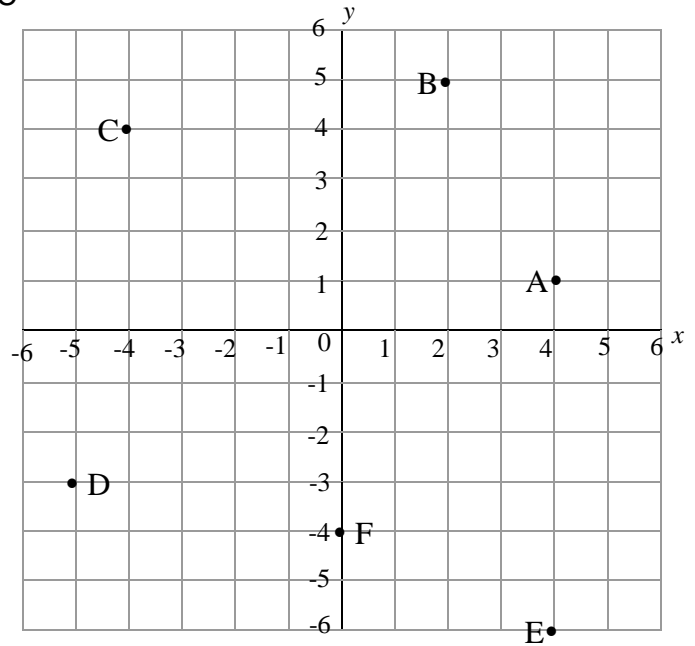
B(.....,) [2]

C(.....,) [2]

D(.....,) [2]

E(.....,) [2]

F(.....,) [2]



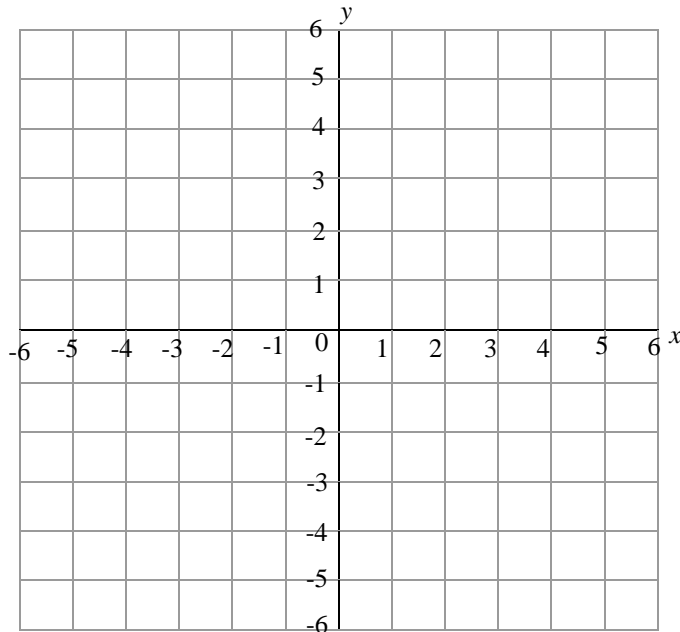
2. On the grid below.

a. Plot and label correctly A(4, 2) B(-2, 2) [2]

b. Plot and label correctly C(-2, -5) D(4, -5) [2]

c. Using a ruler draw a line from A to B to C to D to A [3]

d. What shape have you drawn? [1]



To improve I need to

Name

Averages

$$\frac{\dots}{25} \times 100 = \dots\%$$

1. Find the **Mode** for each of the following set of numbers [3]

a. 2, 3, 5, 3, 6, 4 **Mode**

b. 7, 9, 11, 7, 12, 11, 6, 11 **Mode**

c. 45, 43, 47, 48, 43, 47, 50, 45, 47, 46 **Mode**

2. Find the **Range** for each of the following set of numbers [6]

a. 2, 3, 5, 3, 6, 4 **Range**

b. 7, 9, 11, 7, 12, 11, 6, 11 **Range**

c. 45, 43, 47, 48, 43, 47, 50, 45, 47, 46 **Range**

3. Find the **Median** for each of the following set of numbers [6]

a. 2, 3, 5, 6, 4 **Median**.....

b. 17, 15, 13, 11, 12, **Median**.....

c. 38, 43, 57, 41, 47, 50, 48 **Median**.....

4. Find the **Mean** for each of the following set of numbers [9]

a. 6, 3, 5, 2, 4 **Mean**.....

b. 16, 14, 13, 10, 12, **Mean**.....

c. 38, 43, 57, 41, 47, 50, **Mean**.....

1 bonus mark for effort

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Name

Numeracy - 1

$\frac{\dots}{100} \times 100 = \dots\%$

1. Complete the multiplication grid

X	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4						
2	2	4								
3										
4										
5										
6										
7										
8										
9										
10										

Show your working out clearly

[6]

$$\begin{array}{r}
 636 \\
 + 247 \\
 \hline
 \hline
 \end{array}$$

$$\begin{array}{r}
 869 \\
 - 518 \\
 \hline
 \hline
 \end{array}$$

$$\begin{array}{r}
 674 \\
 - 329 \\
 \hline
 \hline
 \end{array}$$

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