

Ysgol Uwchradd Caergybi

Mathematics Department Homework Pack

Year 7 Module 3 Intermediate

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Name

Class Teacher

Name

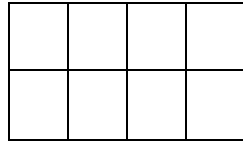
Fractions

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

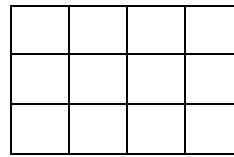
1. Shade the following correctly

[4]

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

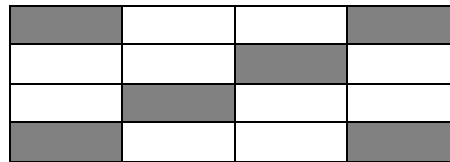


b. $\frac{1}{4}$



2. What fraction of the following shape

a. is shaded [2]



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

3. Find

a. $\frac{1}{2}$ of £24 [1]

d. $\frac{1}{5}$ of £45 [1]

.....

.....

b. $\frac{1}{4}$ of £40 [1]

e. $\frac{3}{4}$ of £40 [2]

.....

.....

c. $\frac{1}{7}$ of £35 [1]

f. $\frac{4}{7}$ of £35 [2]

.....

.....

4. Write the following fraction in it's simplest form

[4]

a. $\frac{20}{50}$

b. $\frac{12}{24}$

5. Fill in the following table

[5]

Fraction	Decimal	Percentage
....	0.75
$\frac{1}{4}$	25%
.....	0.2

To improve I need to

Name

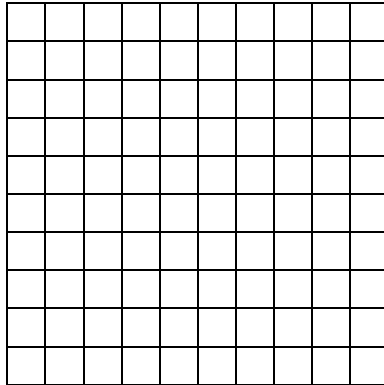
Percentages

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

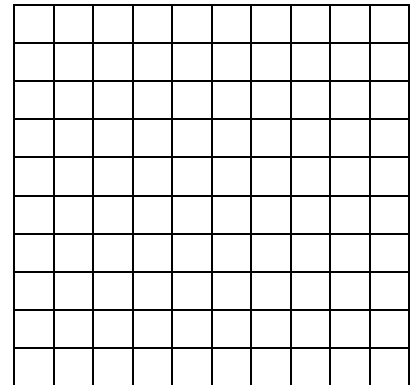
6. Shade the following correctly

[4]

a. 25%



b. 17%



7. Write the following fractions as a percentage

[6]

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

b. $\frac{32}{50}$ %

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

8. Write the following decimals as percentages

[6]

a. 0.40%

b. 0.07%

c. 0.3%

9. 8% of pupils in 7C were **absent** on Monday .

Write what percentage were **present**

[1]

10. Find

a. 50% of 600cm [1]

c. 10% of 240kg [1]

b. 50% of £48 [1]

d. 20% of 240m [2]

c. 10% of 80kg [1]

d. 5% of 240m [2]

To improve I need to

Name

Algebra

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

1. Simplify

a. $4a + 5a + 6b + 2b$

.....

c. $2a + 5b + 4a - 3b$

.....

b. $7a - 3a$

.....

d. $8a + 4b - 5a - 5b$

.....

[8]

2. Rewrite the following fractions using the rules of Algebra

a. $F = m \times g$

.....

b. $A = b \times h \times 2$

.....

c. $s \div t = v$

.....

[3]

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

$a = 4$

$b = 3$

$c = 2$

a. $a + b + c$

.....

.....

d. $5b + 3c$

.....

.....

b. $3a + 2b$

.....

.....

e. $2a + 4b - c$

.....

.....

c. $5c - b$

.....

.....

f. b^2

.....

.....

[12]

4. If $a + b = 7$ and $ab = 12$ find the values of 'a' and 'b'

[2]

$a = \dots\dots\dots$

$b = \dots\dots\dots$

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]

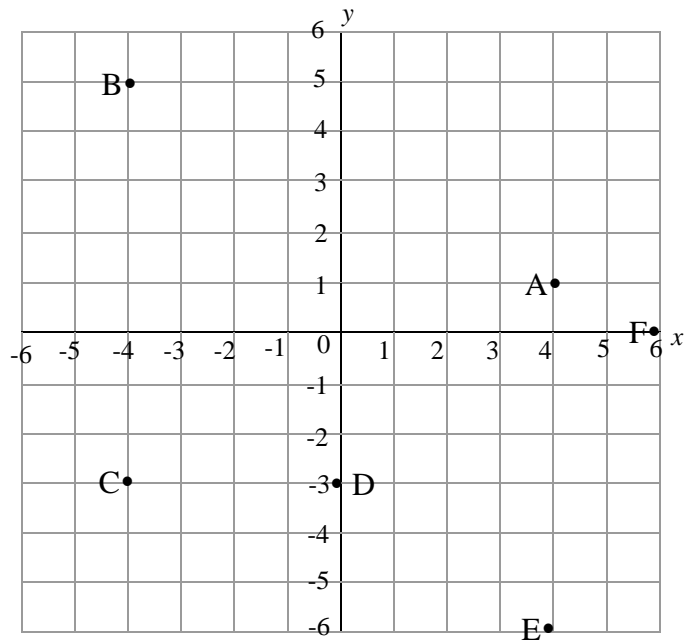
B(.....,) [2]

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

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

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

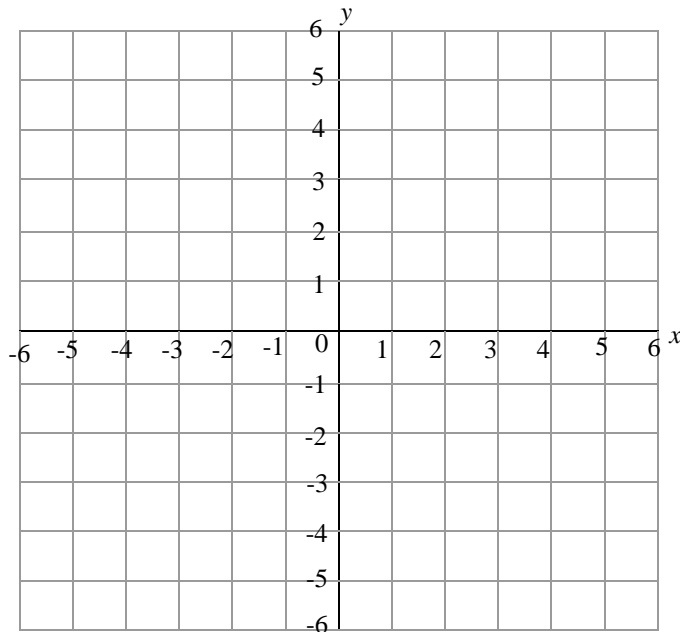
F(.....,) [2]



2. On the grid below.

a. Plot and label correctly A(4, 2) B(-2, 2) C(0, 3) D(-4, 0) [4]

b. Mark and plot the mid point of A and B and Label **M** [2]



3. On the grid above draw and label the lines [2]

a. $x = 5$

b. $y = -4$

To improve I need to

Name

Averages

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

1. The ages of the members of a primary school football team were

7 8 7 6 9

- a. Work out the mean value [3]
- b. Write down the mode [1]
- c. Find the median [2]

2. The following are the marks out of 20, nine pupils achieved in their maths homework

18 14 20 17 6 11 8 12 14 16

- a. Work out the mean value [3]
- b. Write down the mode [1]
- c. Find the median [2]
- d. Work out the range [1]

3. Mrs Cabbage made a survey of the number of pieces of fruit ten pupils from class **7.A** had in the last week

3 10 7 1 3 6 9 11 4 12

- a. Work out the mean value [3]
- b. Write down the mode [1]
- c. Find the median [2]
- d. Work out the range [1]

To improve I need to

Name

Numeracy - 1

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

1. Complete the multiplication grid

[90]

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

2. Show your working out clearly

[4]

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

$$\begin{array}{r} 1234 \\ - 666 \\ \hline \end{array}$$

3. Write down all the factors of 28 [2]

4. Write down the all the prime numbers between 10 and 30 [2]

5. Find the value of $7^2 + \sqrt{64}$ [2]

To improve I need to

Name

Numeracy - 2

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

1. Complete the multiplication grid

[90]

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

2. What number must be added to 76 to make 115? [1]

3. What is the difference between 76 and 49 [1]

4. Using only the numbers in the following list, **34 41 76 12 37 36 21**

a. two numbers that add up to 46, [1]

b. two numbers which differ by 39, [1]

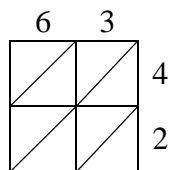
c. a multiple of 7. [1]

d. a square number [1]

5. Multiplication - Show your working out clearly.

[4]

a



b

