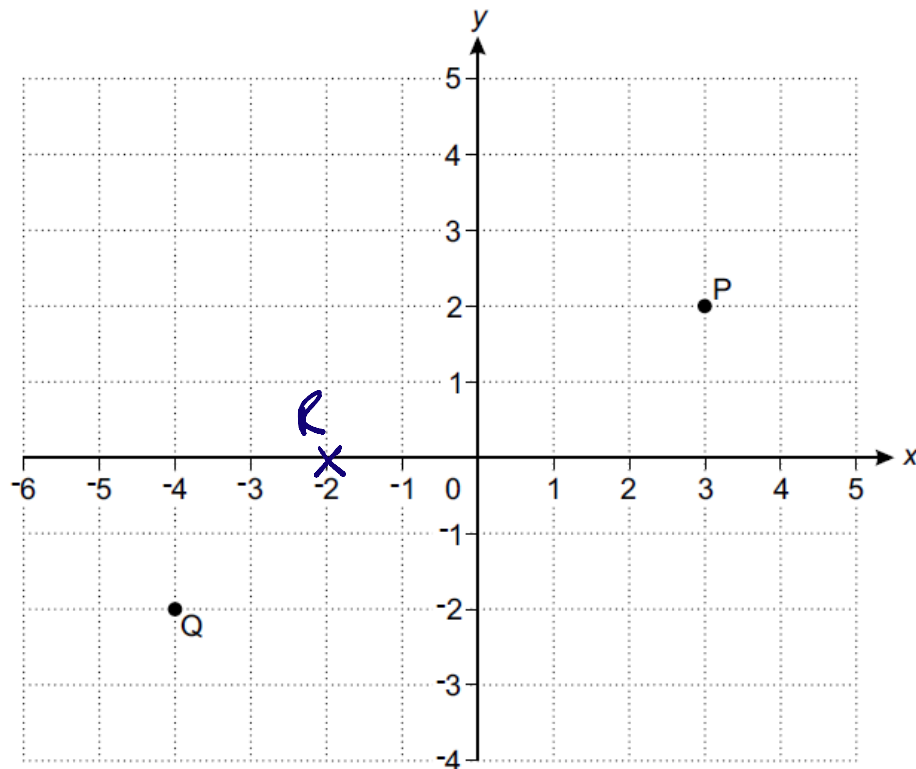


# Coordinates (F)

A collection of 9-1 Maths GCSE Sample and Specimen questions from AQA, OCR, Pearson-Edexcel and WJEC Eduqas.

Name:	Mel@JustMaths
Total Marks:	

1. Points P and Q are shown on this grid.



a) (i) Write down the coordinates of point P.

(a)(i) ( 3 , 2 ) [1]

(ii) Write down the coordinates of point Q.

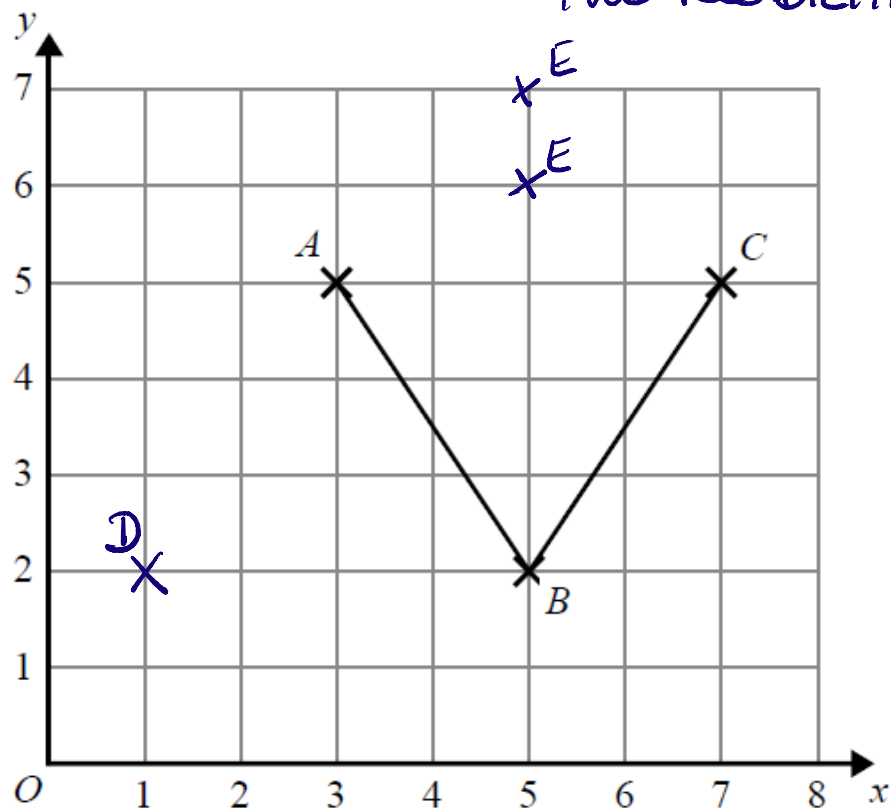
(ii) ( -4 , -2 ) [1]

(b) Plot point R at (-2, 0).

✓ [1]

2. Here is a grid showing the points A, B and C.

TWO POSSIBILITIES



(a) Write down the coordinates of the point A.

..... (3, 5) ..... [1]

(b) On the grid, mark with a cross (x) the point (1, 2).

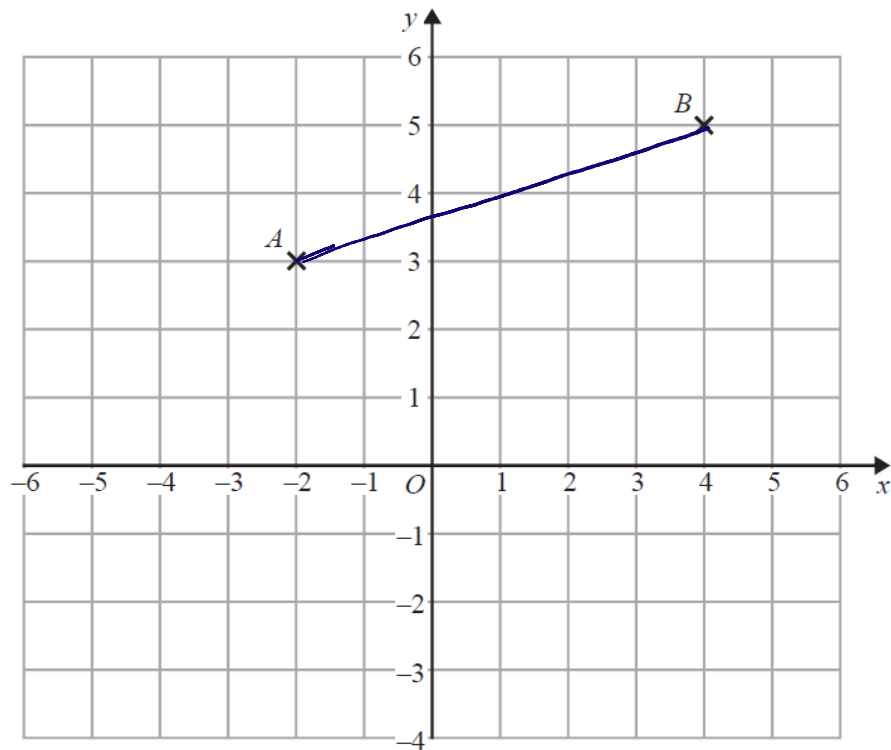
Label this point D.

✓ [1]

(c) On the grid, mark with a cross (x) a point E, so that the quadrilateral ABCE is a kite.

[1]

3.



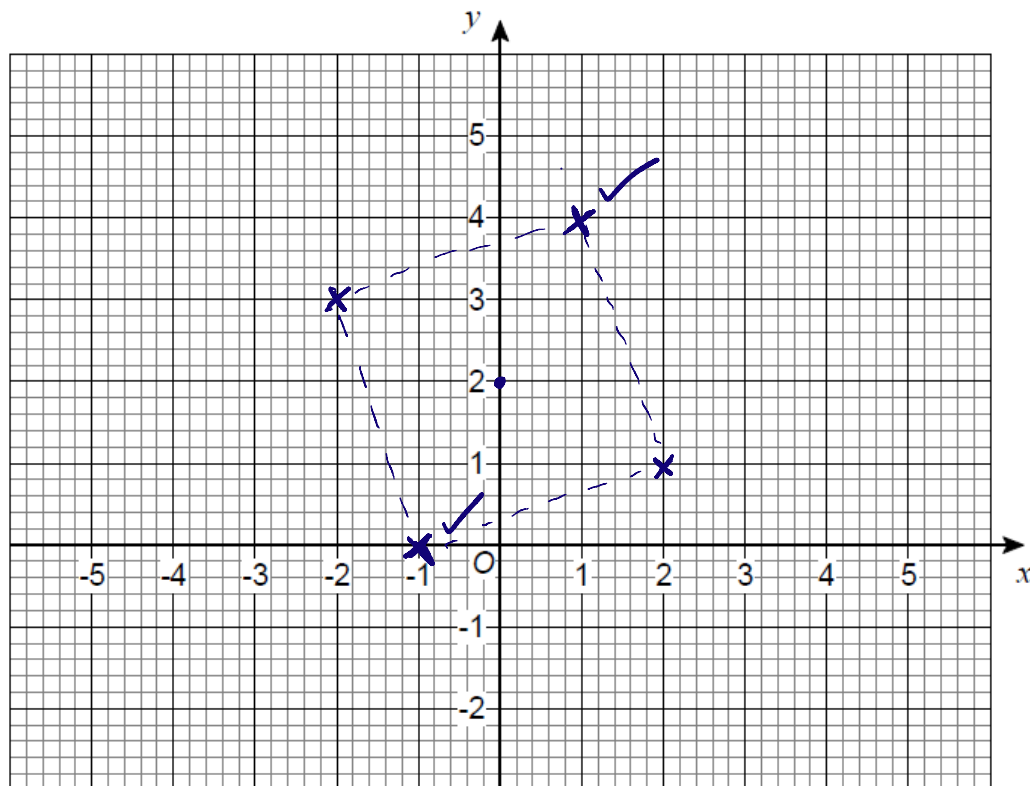
(a) Write down the coordinates of point B.

(.....4....., .....5.....) [1]

(b) Find the coordinates of the midpoint of AB.

(.....1....., .....4.....) [1]

4. The points  $(-1, 0)$  and  $(1, 4)$  are the diagonally opposite corners of a square.

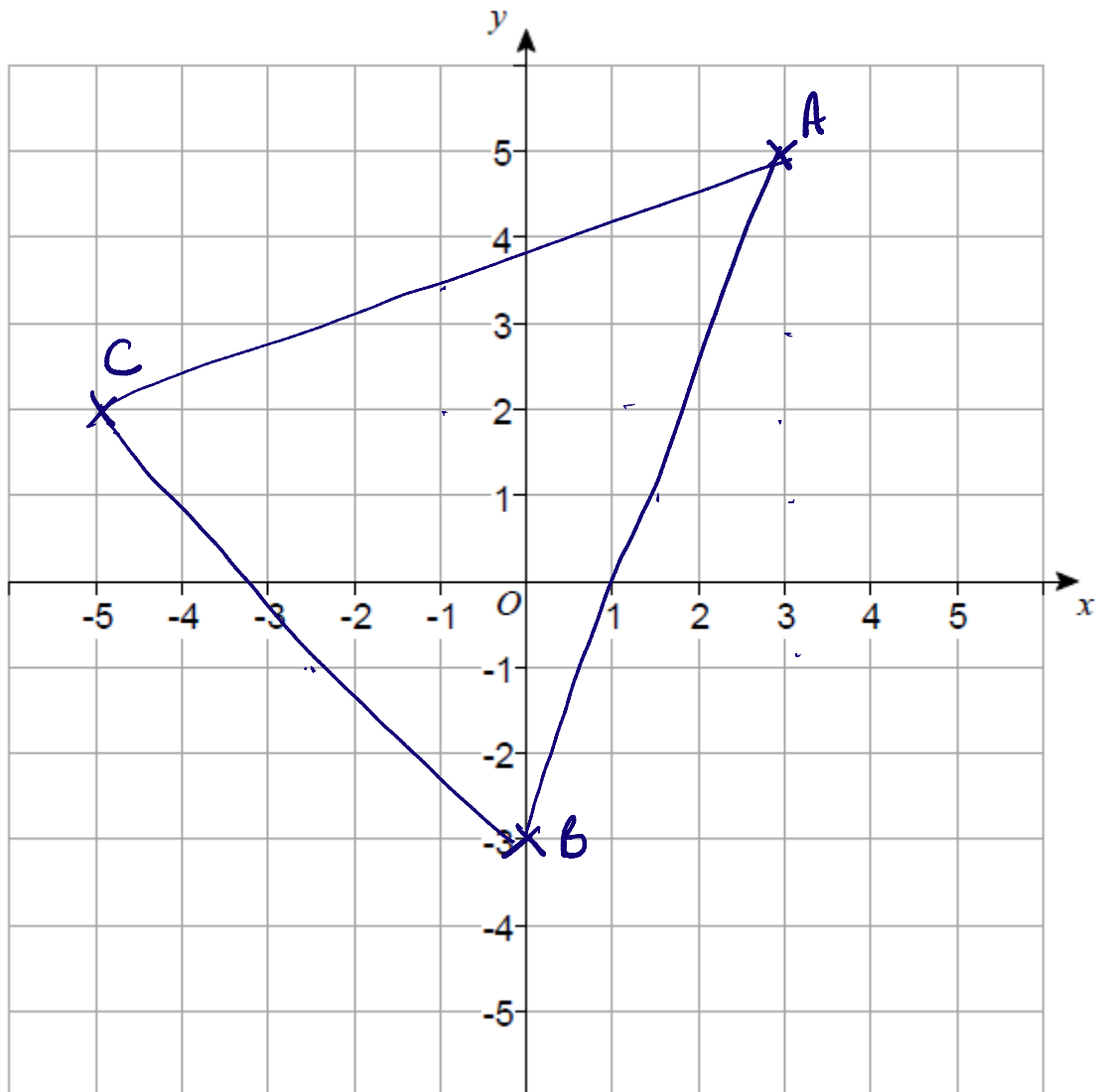


Work out the coordinates of the other two corners of the square.

(-2, 3) and (2, 1) [2]

5. A (3, 5), B (0, -3) and C (-5, 2) are three points.

What type of triangle is ABC?



You must show your working, which may be on the diagram.

Isosceles ...  $AC = AB$   
 $\neq BC$

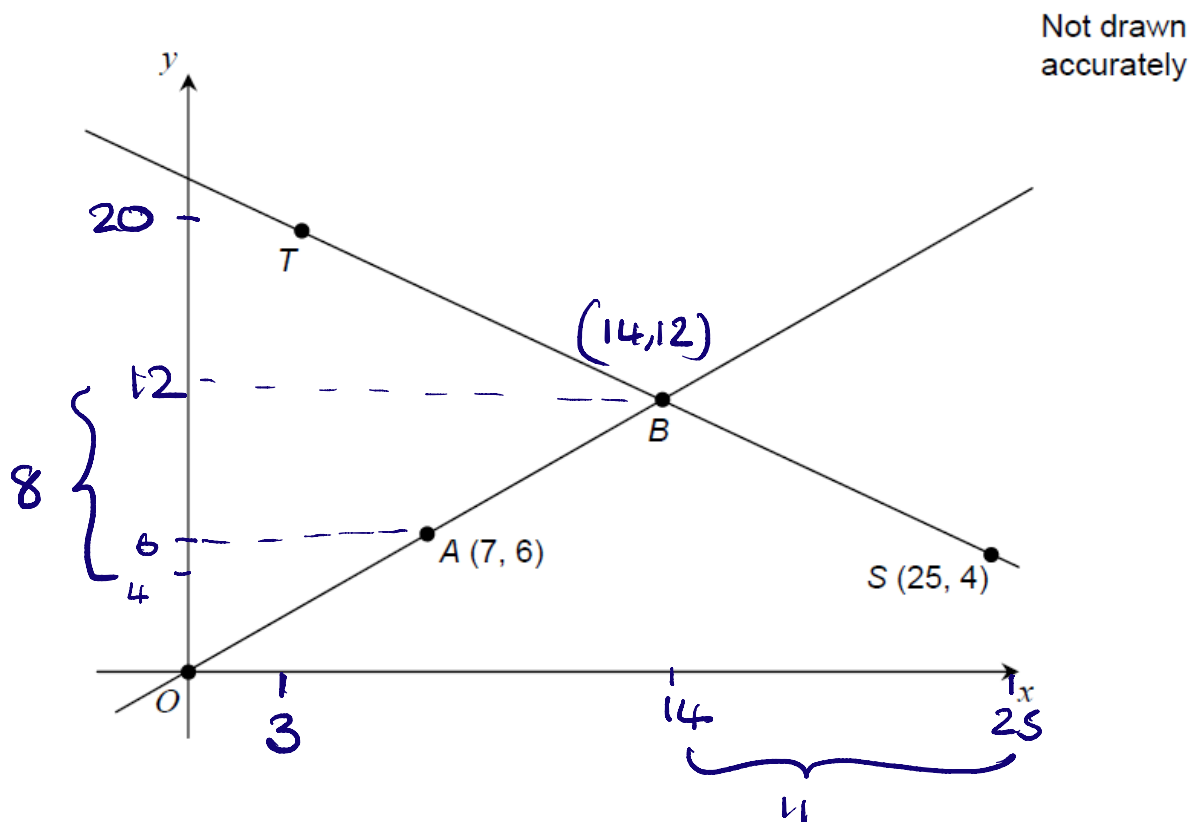
[2]

6. Two straight lines are shown.

A is the midpoint of OB.

B is the midpoint of TS.

Work out the coordinates of T.  $(3, 20)$



[3]

7. A square ABCD has sides of length 5 units.

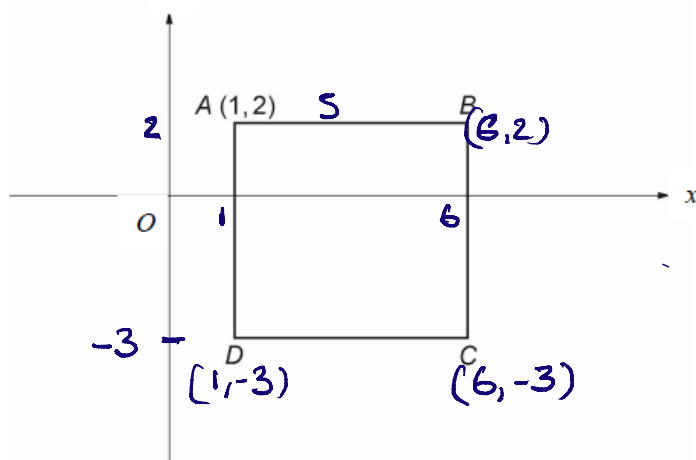
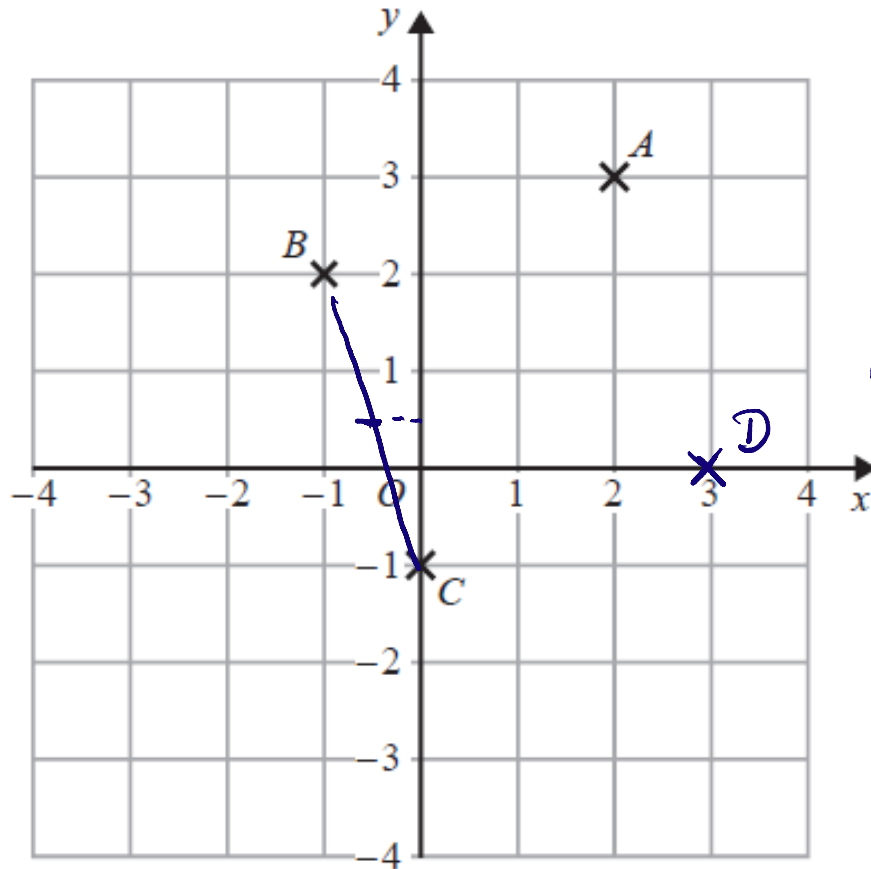


Diagram not drawn to scale

Find the coordinates of point C.

Coordinates of C =  $(6, -3)$  [2]

8.



(a) Write down the coordinates of point C.

(.....0....., .....-1.....) [1]

ABCD is a square.

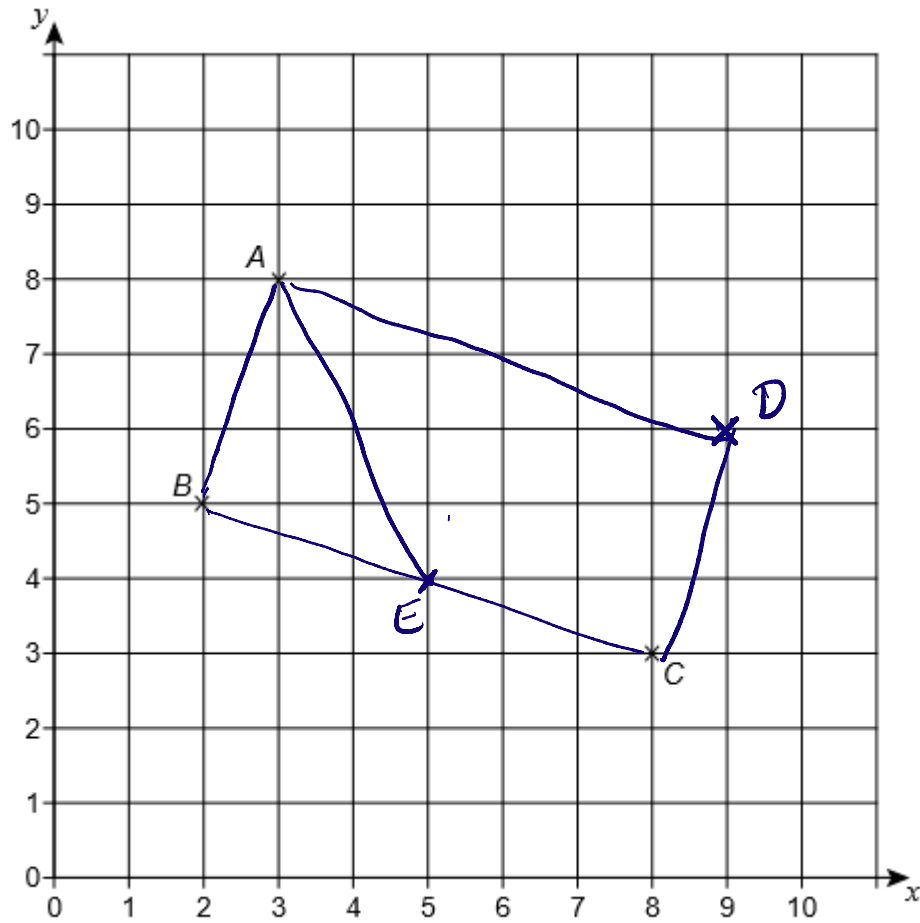
(b) On the grid, mark with a cross (X) the point D so that ABCD is a square.

✓ [1]

(c) Write down the coordinates of the midpoint of the line segment BC.

(.....-0.5....., .....0.5.....) [1]

9.  $A$ ,  $B$  and  $C$  are three vertices of a quadrilateral plotted on a centimetre grid.



a) Plot  $D$  on the grid so that  $ABCD$  is a rectangle.



[1]

b)  $E$  is the midpoint of  $BC$ .

Circle the two answers that describe triangle  $ABE$ .

Scalene

isosceles

equilateral

right-angled

[2]

c) Circle the ratio

area of triangle  $ABE$  : area of rectangle  $ABCD$

1 : 2

1 : 3

1 : 4

1 : 8

[1]

## CREDITS AND NOTES

Question	Awarding Body
1	OCR
2	Pearson Edexcel
3	Pearson Edexcel
4	AQA
5	AQA
6	AQA
7	WJEC Eduqas
8	Pearson Edexcel
9	AQA

### Notes:

These questions have been retyped from the original sample/specimen assessment materials and whilst every effort has been made to ensure there are no errors, any that do appear are mine and not the exam board's (similarly any errors I have corrected from the originals are also my corrections and not theirs!).

Please also note that the layout in terms of fonts, answer lines and space given to each question does not reflect the actual papers to save space.

These questions have been collated by me as the basis for a GCSE working party set up by the GLOW maths hub - if you want to get involved please get in touch. The objective is to provide support to fellow teachers and to give you a flavour of how different topics "could" be examined. They should not be used to form a decision as to which board to use. There is no guarantee that a topic will or won't appear in the "live" papers from a specific exam board or that examination of a topic will be as shown in these questions.



### Links:

AQA <http://www.aqa.org.uk/subjects/mathematics/gcse/mathematics-8300>

OCR <http://ocr.org.uk/gcsemaths>

Pearson Edexcel <http://qualifications.pearson.com/en/qualifications/edexcel-gcses/mathematics-2015.html>

WJEC Eduqas <http://www.eduqas.co.uk/qualifications/mathematics/gcse/>

### Contents:

This version contains questions from:

AQA – Sample Assessment Material, Practice set 1 and Practice set 2

OCR – Sample Assessment Material and Practice set 1

Pearson Edexcel – Sample Assessment Material, Specimen set 1 and Specimen set 2.

WJEC Eduqas – Sample Assessment Material