

# **GCSE MATHEMATICS**

## **PLC PROJECT**

**INSTRUCTIONS:**

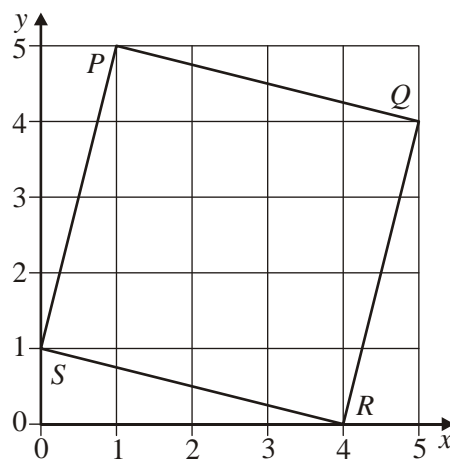
# Coordinates 1

## Content

- Find the coordinates of the midpoint of the line segment AB, given the points A and B
- Plot points in all 4 quadrants
- Understand coordinates in three dimensions

## Question 1

The square  $PQRS$  is drawn on a centimetre square grid.



- (a) The coordinates of  $P$  are  $(1, 5)$ .  
Write down the coordinates of  $Q$ ,  $R$  and  $S$ .

Answer  $Q$  ( ..... , ..... )

$R$  ( ..... , ..... )

$S$  ( ..... , ..... )

(2)

- (b) Calculate the area of square  $PQRS$ .  
You **must** show your working.  
State the units of your answer.

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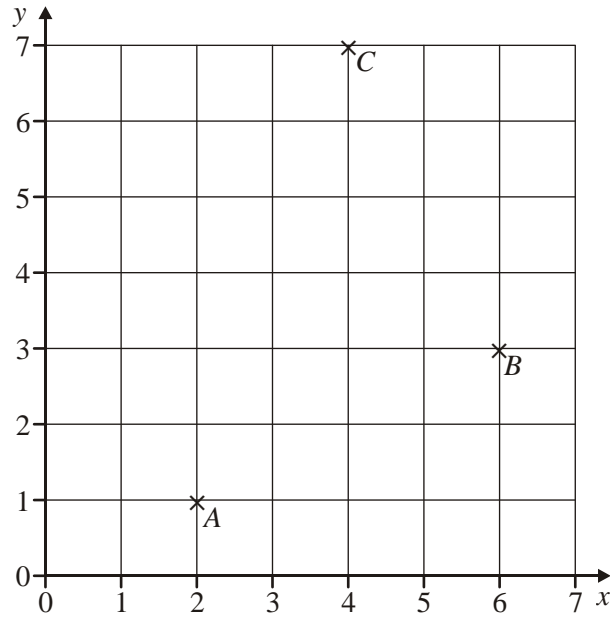
Answer .....

(4)

**(Total 6 marks)**

## Question 2

Points  $A$ ,  $B$  and  $C$  are three corners of a square  $ABCD$ .



- (a) Write down the coordinates of  $A$ ,  $B$  and  $C$ .

$A$  (..... , .....

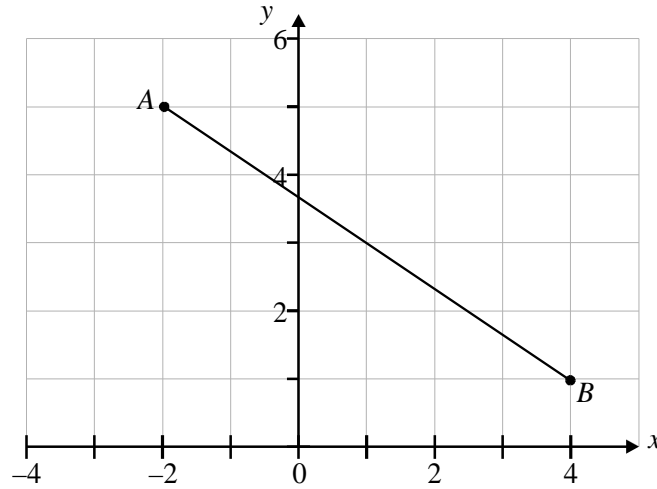
$B$  (..... , .....

$C$  (..... , .....

(2)  
(Total 2 marks)

### Question 3

The diagram shows the positions of  $A (-2, 5)$  and  $B (4, 1)$ .



Find the coordinates of  $M$ , the mid-point of the line  $AB$ .

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Answer.....

(Total 2 marks)

**Total Mark / 10**