Silver Level

Question Paper 3

Level	IGCSE
Subject	Maths
Exam Board	Edexcel
Difficulty Level	Silver
Booklet	Question Paper 3

Time Allowed: **60 minutes**

Score: **/50**

Percentage: **/100**

Grade Boundaries:

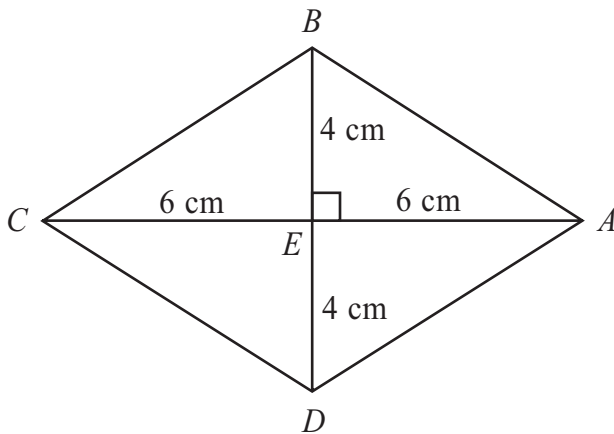| 9	8	7	6	5	4	3	2	1
>90%	80%	70%	60%	50%	40%	30%	20%	<20%

1

Diagram **NOT** accurately drawn

ABCD is a rhombus.
The diagonals *AC* and *BD* cross at the point *E*.
AE = *CE* = 6 cm.
BE = *DE* = 4 cm.
Angle *AEB* = 90°

(a) Work out the area of the rhombus.

.... cm^2

(3)

(b) Work out the length of *AB*.
   Give your answer correct to 3 significant figures.

.... cm

(3)

(Total for Question 1 is 6 marks)

2 (i) Solve the inequalities $-6 < 4x \leqslant 8$

....

(ii) n is an integer.

Write down all the values of n which satisfy $-6 < 4n \leqslant 8$

....

(Total for Question 2 is 4 marks)

3 (a) Find the Highest Common Factor (HCF) of 75 and 90

....
(2)

(b) Find the Lowest Common Multiple (LCM) of 75 and 90

....
(2)

(Total for Question 3 is 4 marks)

4 (a) Find the gradient of the line with equation $3x + 4y = 10$

....
(3)

(b) Find the coordinates of the point of intersection of the line with equation $3x + 4y = 10$
and the line with equation $5x - 6y = 23$
Show your working clearly.

(.......................... , ...)
(5)

(Total for Question 4 is 8 marks)

5   Solve the inequality $x^2 < 16$

....

(Total for Question 5 is 2 marks)

6 (a) Write $2^3 \times 2^6$ as a single power of 2

....

(1)

(b) Write $\dfrac{3^9}{3^4}$ as a single power of 3

....

(1)

(c) $\dfrac{5^n}{5^4 \times 5^6} = 5^3$

Find the value of n.

$n = $ ....

(2)

(Total for Question 6 is 4 marks)

7 (a) Solve $3(2x - 1) = 6$

Show clear algebraic working.

$x = $ ....

(3)

(b) Solve $\dfrac{2y + 1}{3} = \dfrac{y - 2}{4}$

Show clear algebraic working.

$y = $ ....

(4)

(Total for Question 7 is 7 marks)

8 The table shows information about the number of peas in each of 25 pods.

Number of peas	1	2	3	4	5	6
Number of pods	3	6	5	8	2	1

(a) Work out the mean number of peas in the 25 pods.

....

(3)

(b) Tariq puts the 25 pods in a bag.
He takes at random one of the pods.

Find the probability that he takes a pod with 3 peas or a pod with 4 peas.

....

(2)

(c) Laila puts the 25 pods in a bag.
She takes at random two pods without replacement.

Calculate the probability that

(i)   there are 3 peas in each of the two pods she takes,

....

(ii) there is a total of 4 peas in the two pods she takes.

....

(5)

(Total for Question 8 is 10 marks)

9 (a) The equation of a line **L** is $2x - 3y = 6$

Find the gradient of **L**.

....

(3)

(b) Find the equation of the line which is parallel to **L** and passes through the point (6, 9).

....

(2)

(Total for Question 9 is 5 marks)