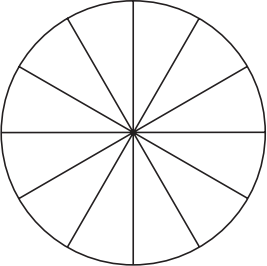
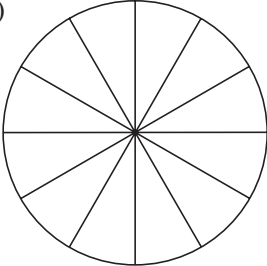


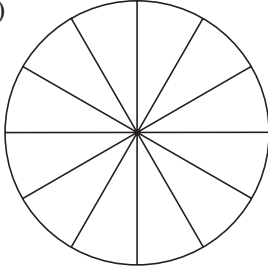
UNIT 36 *Constructions and Enlargements*

CSEC Revision Test

1. Copy the diagrams and shade *six* sectors of each diagram so that it has the order of rotational symmetry indicated.

(a)  Order 3

(b)  Order 2

(c)  Order 1

(5 marks)

2. (a) Using **a ruler, a pencil and a pair of compasses**, construct a trapezium ABCD in which $AB = 8.0$ cm, $AD = 6.0$ cm, $CD = 5.0$ cm, $\angle BAD = 90^\circ$ and $\angle ADC = 90^\circ$. (5 marks)
- (b) Measure and state the length of the side BC. (1 mark)
(CXC)

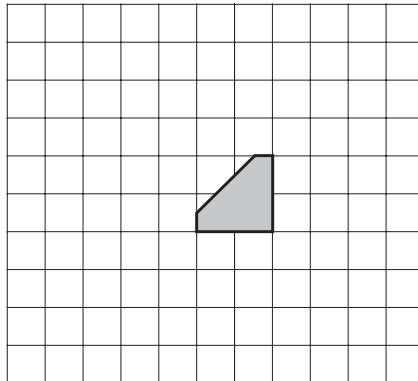
3. (a) Using ruler and compasses only, construct a triangle WXY with $WX = 7$ cm, $XY = 6$ cm and angle $WXY = 90^\circ$. (5 marks)
- (b) Measure and write down the size of angle YWX. [All construction lines must be clearly shown] (CXC)

4. (a) On a grid, (x -axis from 1 to 15 and y -axis from 1 to 8) plot the points and join them up to form the shape ABCDE. (3 marks)
- A (0, 2) B (0, 4) C (1, 3) D (4, 3) E (6, 2)
- (b) Using a scale factor of 2, and centre (0, 0), draw the enlargement of ABCDE. (2 marks)

UNIT 36 *Constructions and Enlargements*

CSEC Revision Test

5.



On a copy of this grid, draw an enlargement, scale factor 3, of the shaded shape.

(3 marks)

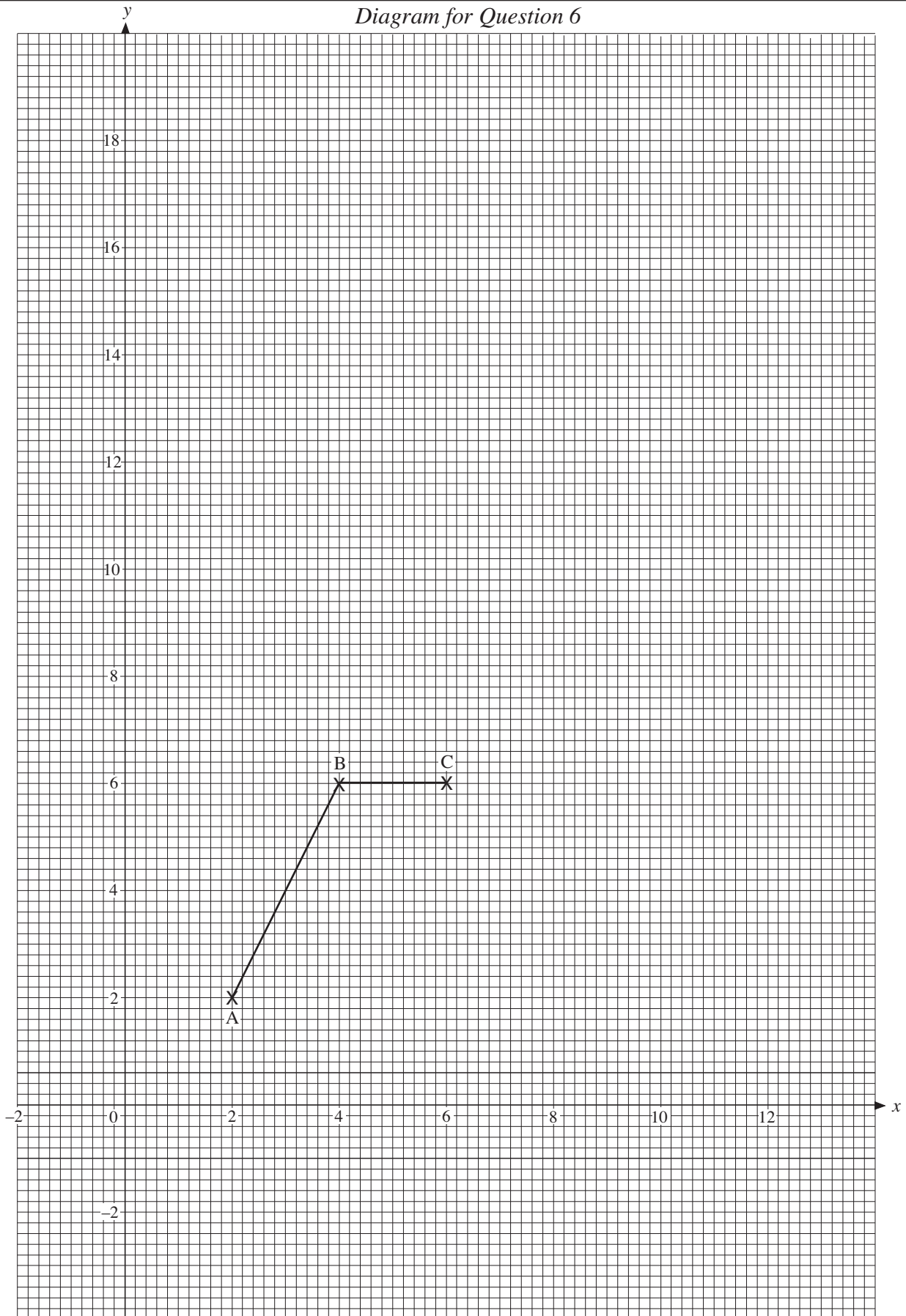
6. (a) The diagram on page 3 shows the sides, AB and BD, of a parallelogram, ABCD.
- Copy the diagram and mark and label the point D to complete the parallelogram. (1 mark)
 - Write down the coordinates of the point D. (2 marks)
 - What is the area of the parallelogram ABCD? (1 mark)
- (b) The parallelogram ABCD is enlarged by scale factor 3 with centre (4, 0) to form a parallelogram PQRS.
- The point A becomes P, point B becomes Q, point C becomes R and point D becomes S.
- On the same axes, draw the parallelogram PQRS. (3 marks)
 - What are the coordinates of the point P? (2 marks)
 - The parallelogram PQRS has rotational symmetry about its centre, T. Find and label the point T. (1 mark)
- (c) The mid-point of PS is M.
- Draw the circle, centre M and radius PM. (2 marks)
 - This circle does not pass through the point T. For what type of parallelogram would the circle pass through the point T? (1 mark)

TOTAL MARKS: 37

UNIT 36 *Constructions and Enlargements*

CSEC Revision Test

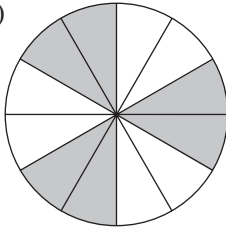
Diagram for Question 6



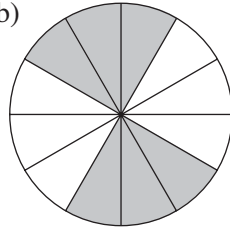
UNIT 36 *Constructions and Enlargements*

CSEC Revision Test Answers

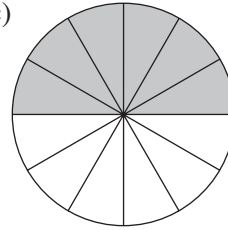
1. (a)



(b)

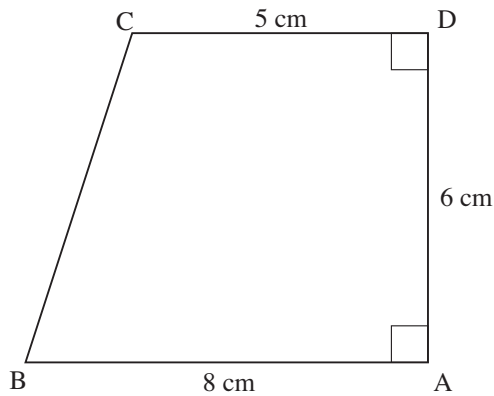


(c)



B2 B1 B2 (5 marks)

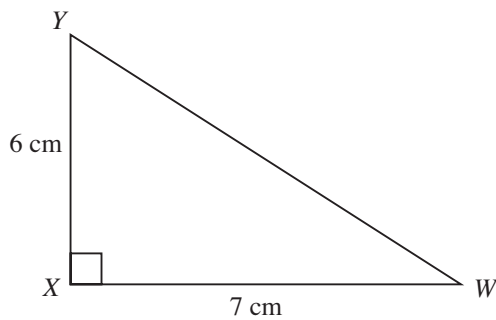
2. (a) Construction



(-1 for each error) B5

(b) 6.7 cm (allow range 6.6 - 6.8) B1 (6 marks)

3. (a) Construction

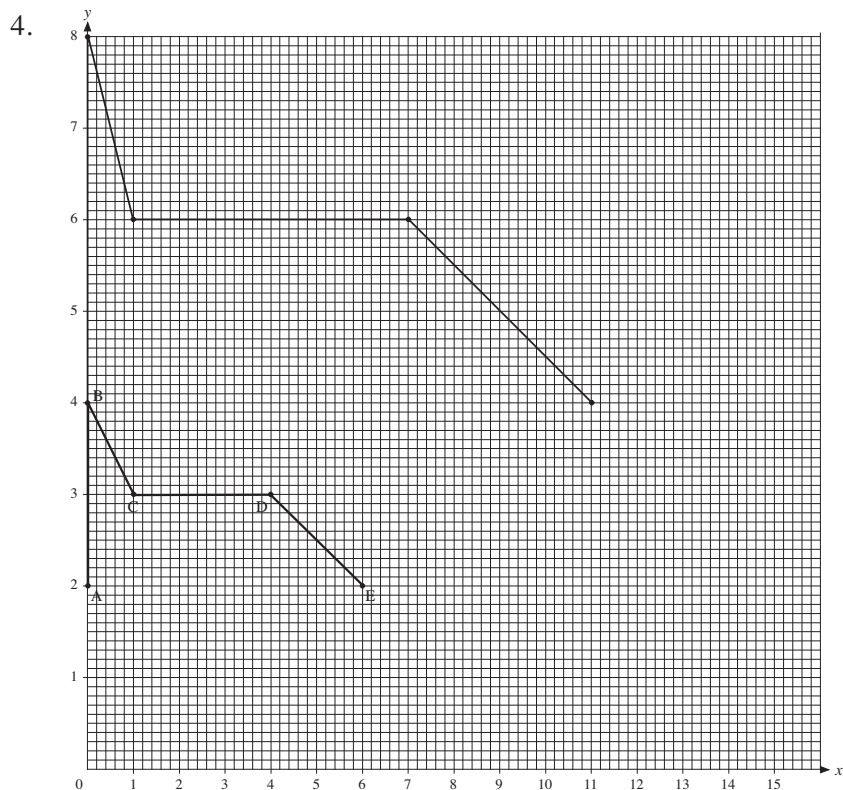


(-1 for each error) B4

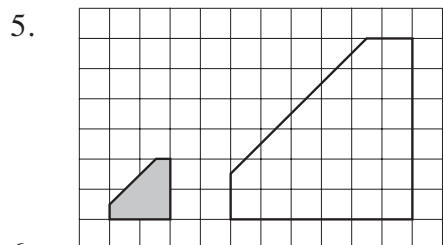
(b) 41° (allow 40° - 41°) B1 (5 marks)

UNIT 36 *Constructions and Enlargements*

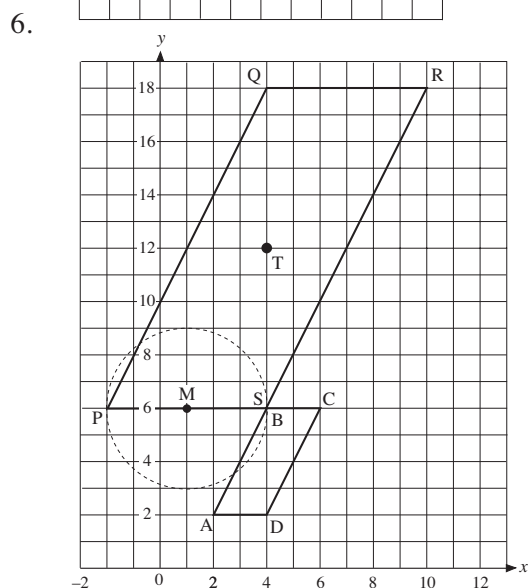
CSEC Revision Test Answers



- (a) (lower line) B3
 (b) (upper line) B2 (5 marks)



- B3
 (3 marks)



- (a) (i) See diagram B1
 (ii) (4, 2) B2
 (iii) 8 B1
- (b) (i) See diagram B3
 (ii) (-2, 6) B2
 (iii) See diagram B1
 T is (4, 12)
- (c) (i) See diagram B2
 M is (1, 6)
 (ii) square B1

(13 marks)

(TOTAL MARKS 37)