

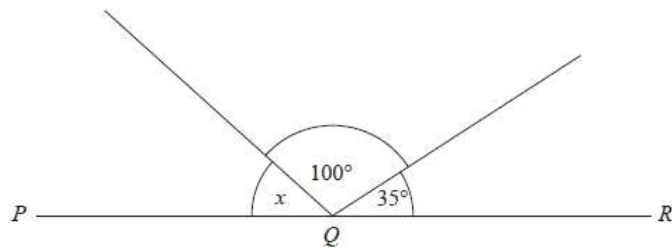
GCSE QUESTIONS

Q1. NON-CALCULATOR

In the space below, draw a hexagon.

(Total for question = 1 mark)

Q2. NON-CALCULATOR



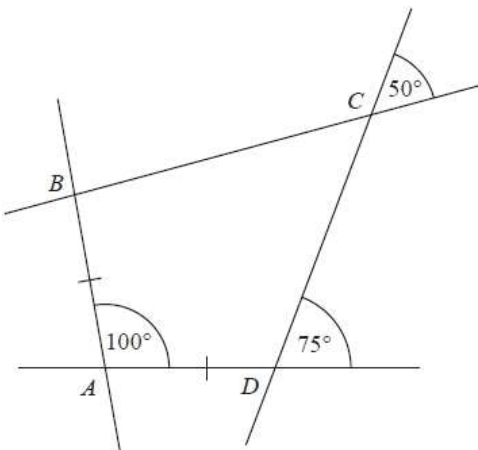
PQR is a straight line.

Work out the size of angle x .

..... °

(Total for question = 2 marks)

Q3. NON-CALCULATOR



The diagram shows quadrilateral $ABCD$ with each of its sides extended.

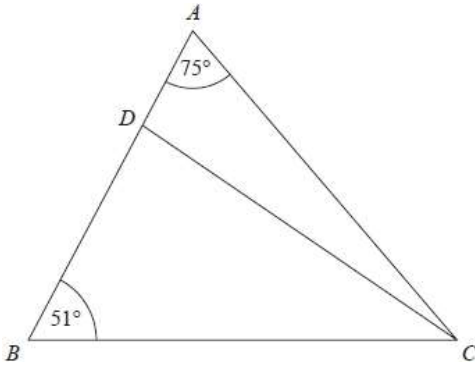
$AB = AD$

Show that $ABCD$ is a kite.

Give a reason for each stage of your working.

(Total for question = 4 marks)

Q4. NON-CALCULATOR



The diagram shows triangle ABC .

ADB is a straight line.

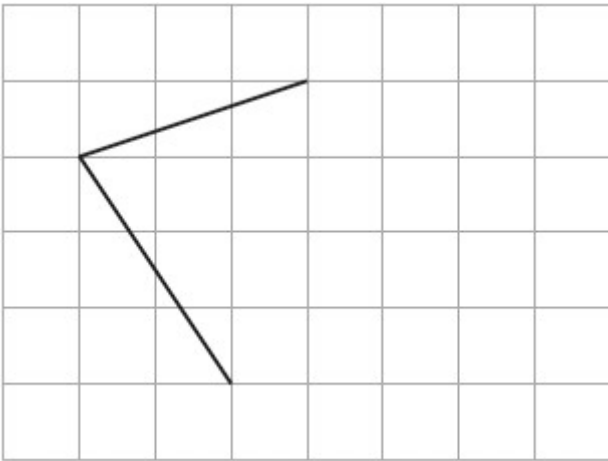
the size of angle DCB : the size of angle $ACD = 2 : 1$

Work out the size of angle BDC .

..... °
(Total for question = 4 marks)

Q5. CALCULATOR ALLOWED

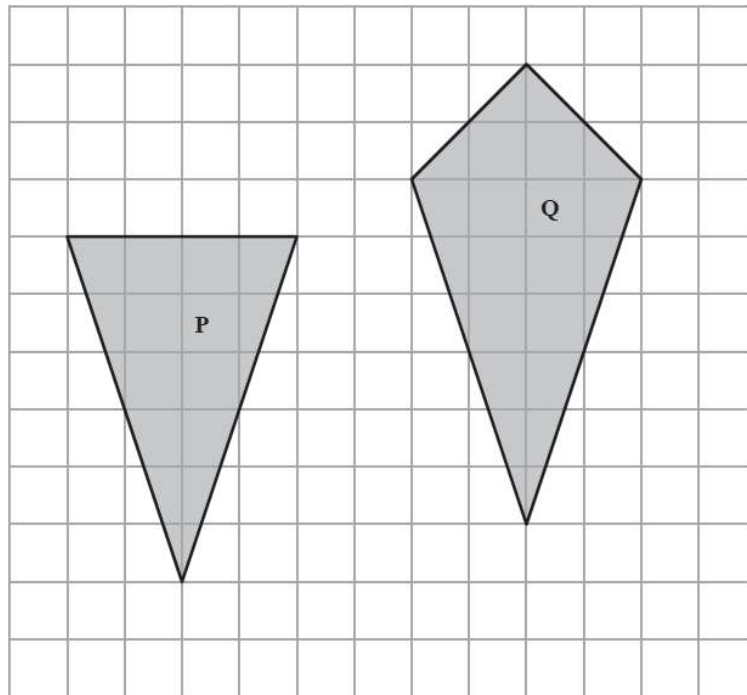
On the grid, complete the diagram of a parallelogram.



(Total for question = 1 mark)

Q6. CALCULATOR ALLOWED

The diagram shows two shapes drawn on a centimetre grid.



(a) Find the area of shape **P**.

.....

(2)

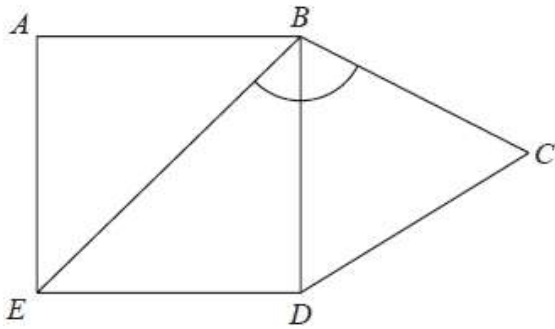
(b) Write down the mathematical name of quadrilateral **Q**.

.....

(1)

(Total for question = 3 marks)

Q7. CALCULATOR ALLOWED



The diagram shows a square $ABDE$ and an equilateral triangle BCD .

Work out the size of angle EBC .

..... °

(Total for question = 2 marks)

Q8. CALCULATOR ALLOWED

Keri draws a triangle.
She says,

"Two of the angles of my triangle are obtuse."

Keri cannot be correct. Explain why.

.....

(Total for question = 2 marks)

Q9. CALCULATOR ALLOWED

Robin is describing a shape to her friend Lilly.

Robin says,

"The shape has four sides. It only has one pair of parallel sides."

(a) What shape is Robin describing?

.....

(1)

Lilly then describes a shape.

Lilly says,

"The shape has four sides. It has two pairs of equal opposite sides. The opposite sides are parallel."

Robin says there are two possible shapes.

(b) Is she correct? Explain your answer.

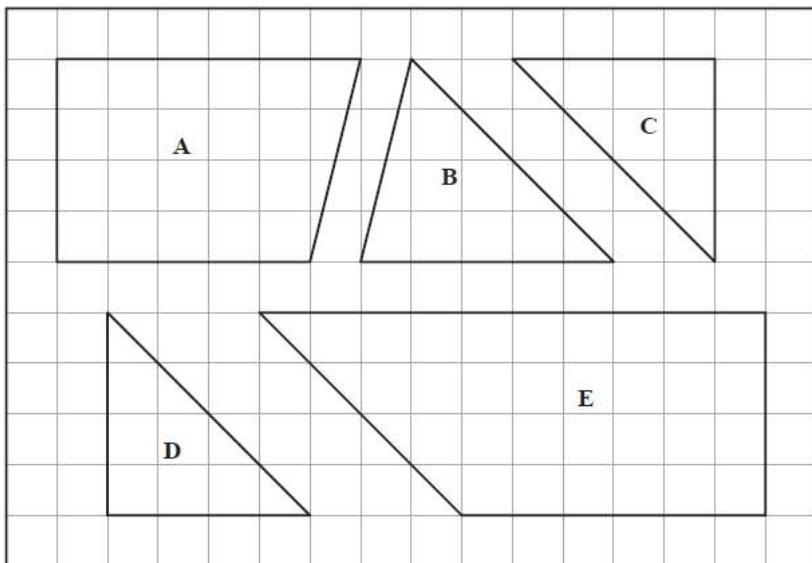
.....

(1)

(Total for question = 2 marks)

Q10. CALCULATOR ALLOWED

The diagram shows five shapes on a centimetre grid.



(a) Write down the name of shape **E**.

.....
(1)

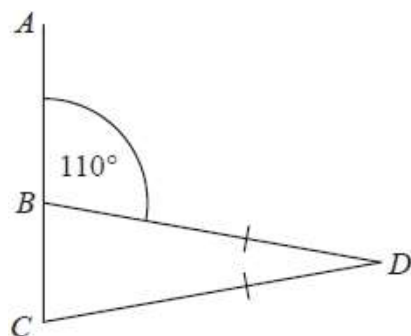
Two of the shapes are congruent.

(b) Write down the letters of these two shapes.

..... and

(1)
(Total for question = 2 marks)

Q11. CALCULATOR ALLOWED



ABC is a straight line.

$BD = CD$

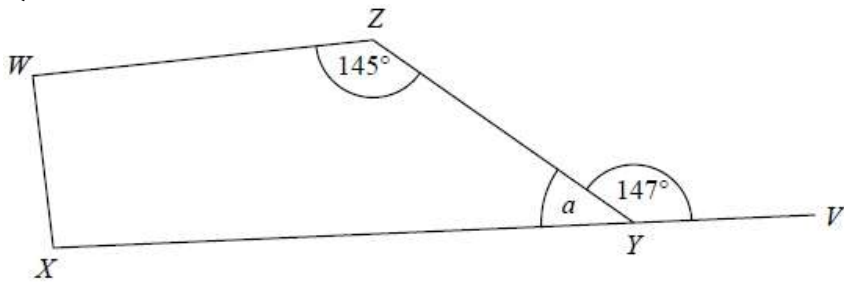
Angle $ABD = 110^\circ$

Show that angle $BDC = 40^\circ$

Give a reason for each stage of your working.

(Total for question = 4 marks)

Q12. CALCULATOR ALLOWED



WXYZ is a quadrilateral.
XYV is a straight line.

(a) (i) Find the size of the angle marked *a*.

..... °

(ii) Give a reason for your answer.

.....

(2)

Angle ZWX = angle WXY

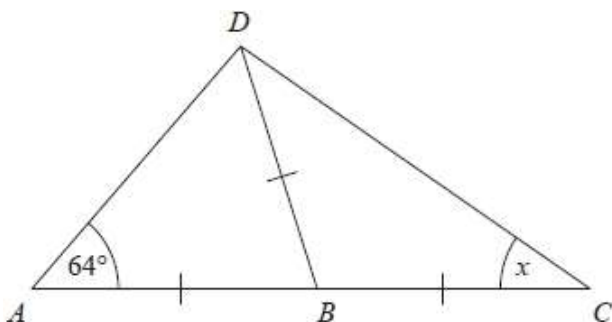
(b) Work out the size of angle ZWX.

..... °

(2)

(Total for question = 4 marks)

Q13. CALCULATOR ALLOWED

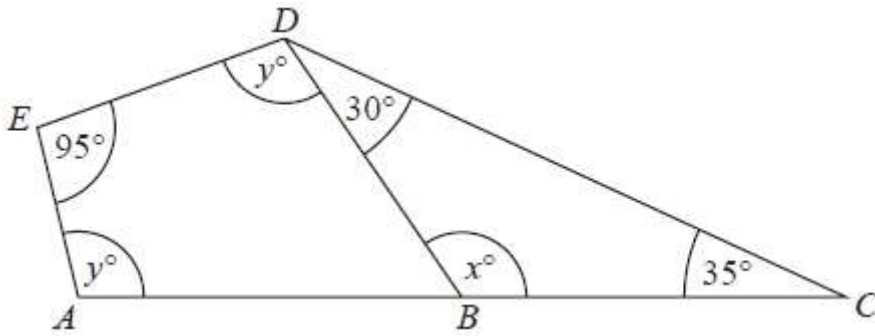


ABC is a straight line.
 $AB = BC = BD$.
Angle *DAB* = 64°

Work out the size of the angle marked *x*.
Give a reason for each stage of your working.

(Total for question = 4 marks)

Q14. CALCULATOR ALLOWED



ABC is a straight line.
BCD is a triangle.
ABDE is a quadrilateral.

(a) (i) Work out the value of x .

.....

(ii) Give a reason for your answer.

.....

(2)

(b) Work out the value of y .

.....

(2)

(Total for question = 4 marks)