

1.

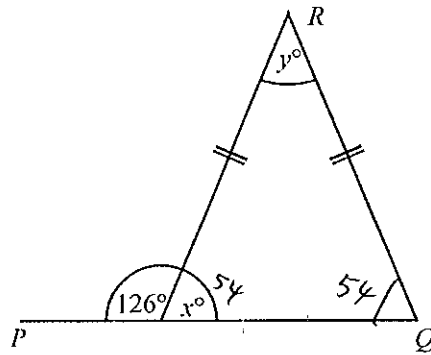


Diagram NOT accurately drawn

PQ is a straight line.

(a) Work out the size of the angle marked x° .

.....54.....° (1)

(b) (i) Work out the size of the angle marked y° .

.....72.....°

(ii) Give reasons for your answer.

.....angles at the base of an isosceles triangle are equal.....

(3)
(4 marks)

2.

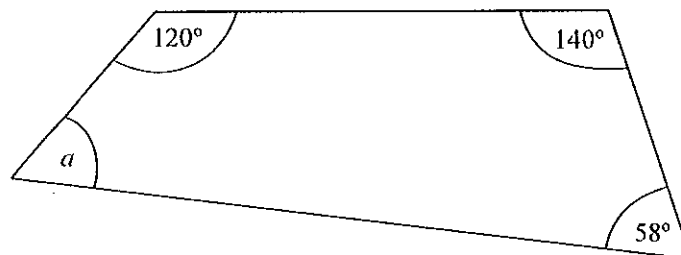


Diagram NOT accurately drawn

Work out the size of the angle a .

.....42.....° (2 marks)

3.

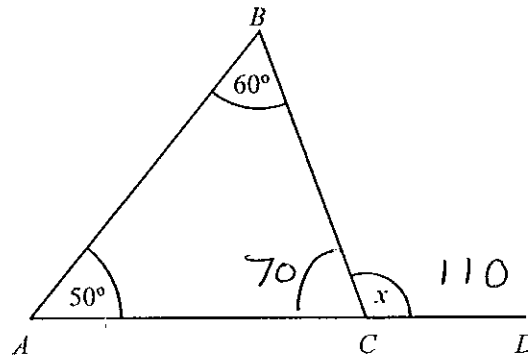


Diagram NOT accurately drawn

In the diagram, ABC is a triangle.
 ACD is a straight line.
Angle $CAB = 50^\circ$.
Angle $ABC = 60^\circ$.

Work out the size of the angle marked x .

.....110.....°

(2 marks)

4.

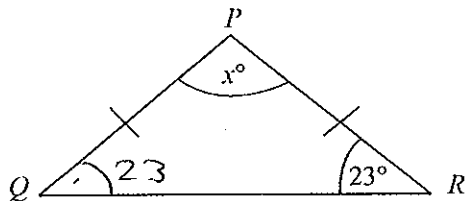


Diagram NOT accurately drawn

PQR is an isosceles triangle.

$PQ = PR$.
Angle $R = 23^\circ$.

Work out the value of x .

$x =$ 134.....

(2 marks)

5.

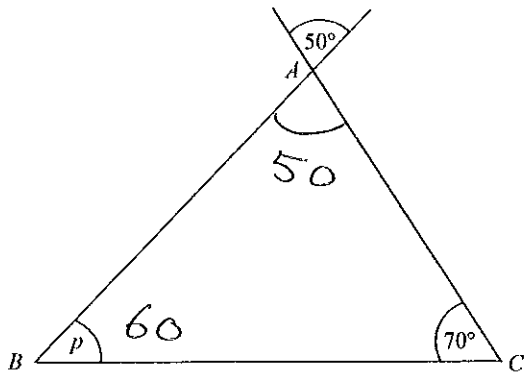


Diagram NOT accurately drawn

ABC is a triangle.

Work out the size of the angle marked p .

$p = \dots 60 \dots^\circ$

(2 marks)

6.

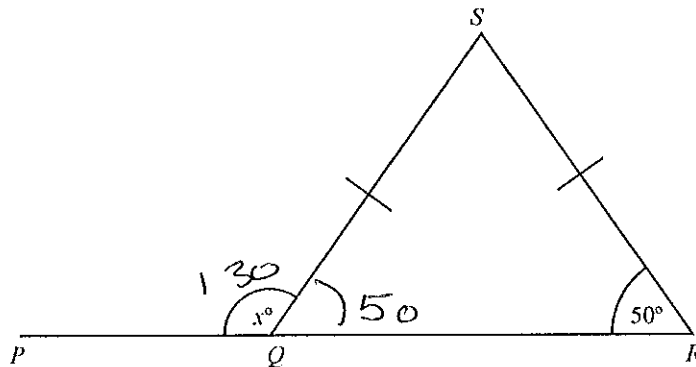


Diagram NOT accurately drawn

PQR is a straight line.

$SQ = SR$.

(i) Work out the size of the angle marked x°

$\dots 130 \dots^\circ$

(ii) Give reasons for your answer.

\dots angles at the base of an isosceles

triangle are equal. Angles on a straight line add up to 180°

(3 marks)

7.

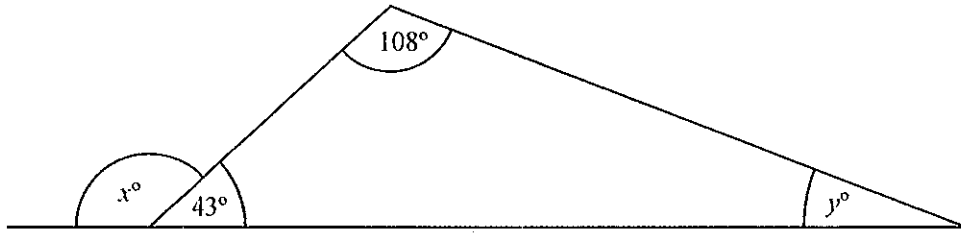


Diagram NOT accurately drawn

(a) Work out the value of x .

$$x = \dots 137 \dots$$

(1)

(b) Work out the value of y .

$$y = \dots 29 \dots$$

(2)

(3 marks)

8.

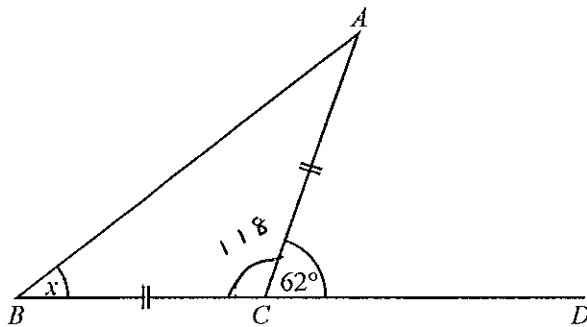


Diagram NOT accurately drawn

Triangle ABC is isosceles, with $AC = BC$.

Angle $ACD = 62^\circ$.

BCD is a straight line.

Work out the size of angle x .

$$x = \dots 31 \dots^\circ$$

(2 marks)

9.

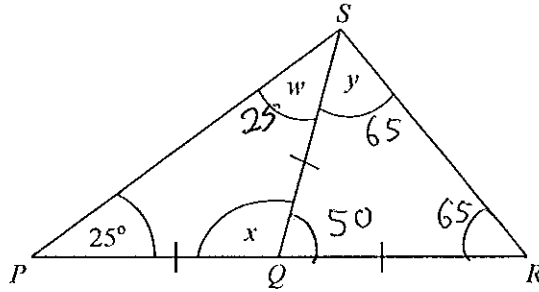


Diagram NOT accurately drawn

PQR is a straight line.

$PQ = QS = QR$.

Angle $SPQ = 25^\circ$.

(a) (i) Write down the size of angle w .

..... 25°

(ii) Work out the size of angle x .

..... 130°

(2)

(b) Work out the size of angle y .

..... 65°

(2)

(4 marks)

10.

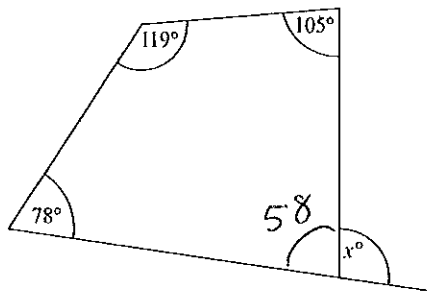


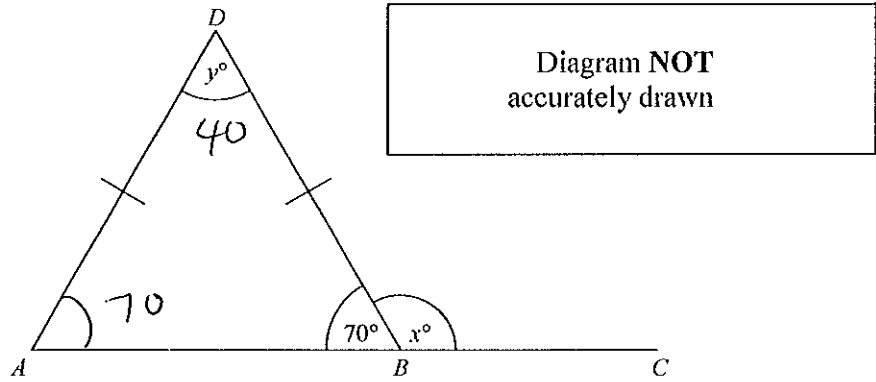
Diagram NOT accurately drawn

Work out the value of x .

$x =$ 122

(3 marks)

11.



ABD is a triangle. ABC is a straight line.
 Angle $ABD = 70^\circ$.
 $AD = BD$.

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

$x = \dots 110 \dots$

(ii) Give a reason for your answer.

angles on a straight line add to 180° (2)

(b) (i) Work out the value of y .

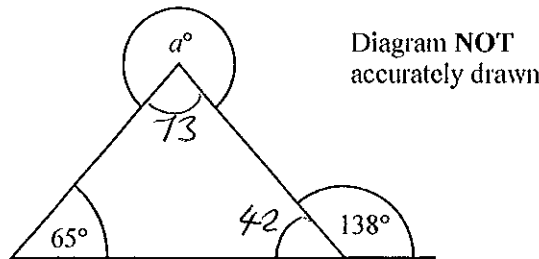
$y = \dots 40 \dots$

(ii) Give a reason for your answer.

angles at the base of an isosceles triangle are equal
 angles in a triangle add up to 180°

(3)
 (5 marks)

12.



Work out the value of a .

$a = \dots 287 \dots$

(3 marks)

13.

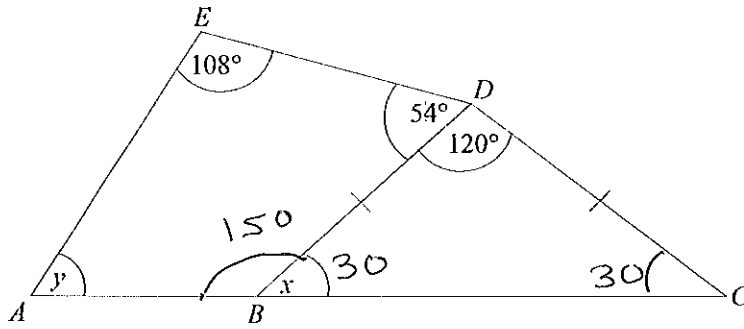


Diagram NOT accurately drawn

In the diagram, ABC is a straight line and $BD = CD$.

(a) Work out the size of angle x .

..... 30

(2)

(b) Work out the size of angle y .

..... 48

(3)

(5 marks)