

Questions

Q1.

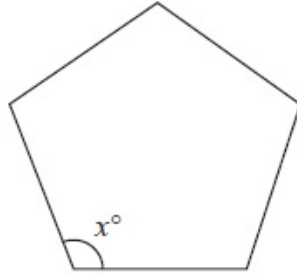


Diagram NOT
accurately drawn

The diagram shows a regular 5-sided polygon.

(a) Work out the value of x .

$x = \dots\dots\dots$

(2)

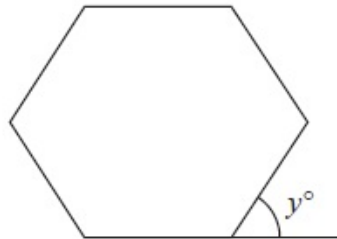


Diagram NOT
accurately drawn

The diagram shows a regular 6-sided polygon.

(b) Work out the value of y .

$y = \dots\dots\dots$

(2)

(Total for Question is 4 marks)

Q2.

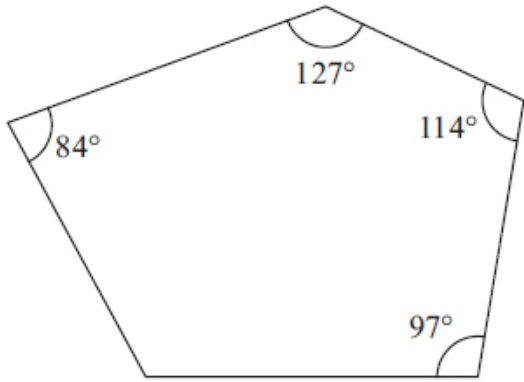


Diagram NOT accurately drawn

Four of the angles of a pentagon are 97° , 114° , 127° and 84° .

Work out the size of the fifth angle.

..... $^\circ$

(Total for question = 4 marks)

Q3.

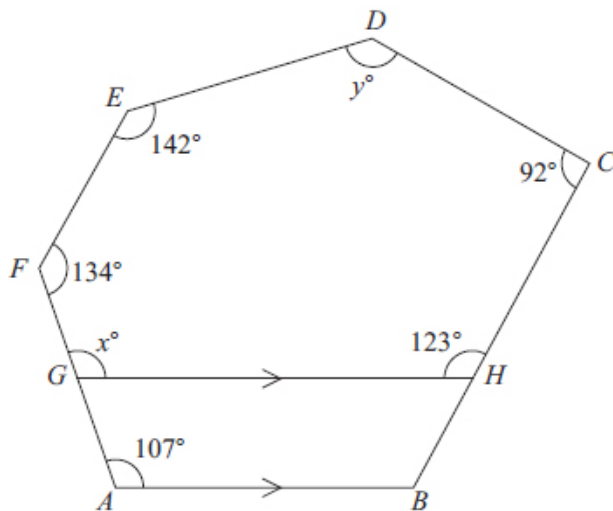


Diagram NOT accurately drawn

$ABCDEF$ is a hexagon.

G is a point on AF .

H is a point on BC .

GH is parallel to AB .

(a) Give a reason why $x = 107$

.....

(1)

(b) Work out the value of y .

$y =$

(Total for question = 6 marks)

Q4.

Work out the size of each exterior angle of a regular polygon with 15 sides.

..... °

(Total for Question is 2 marks)

Q5.

Find the sum of the interior angles of a polygon with 7 sides.

..... °

(Total for question = 2 marks)

Q6.

Each exterior angle of a regular polygon is 15° .

(a) How many sides has the regular polygon?

.....

(2)

The diagram shows 3 identical regular pentagons.

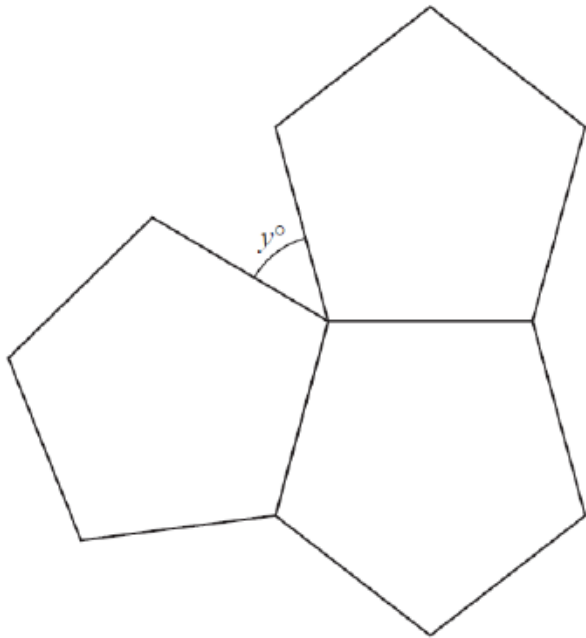


Diagram **NOT** accurately drawn

(b) Work out the value of y .

$y = \dots\dots\dots$

(3)

(Total for question = 5 marks)

Q7.

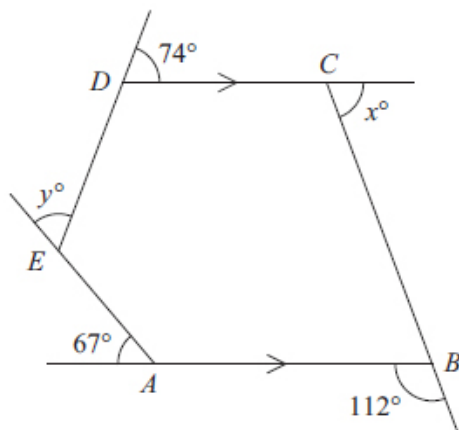


Diagram **NOT** accurately drawn

The diagram shows a pentagon $ABCDE$.
 DC is parallel to AB .

The size of an exterior angle at A is 67°
 The size of an exterior angle at B is 112°
 The size of an exterior angle at C is x°

The size of an exterior angle at D is 74°
 The size of an exterior angle at E is y°

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

$x = \dots\dots\dots$

(ii) Work out the value of y .

$y = \dots\dots\dots$

(4)

(b) Work out the sum of the interior angles of the pentagon $ABCDE$.

$\dots\dots\dots^\circ$

(2)

(Total for question = 6 marks)

Q8.

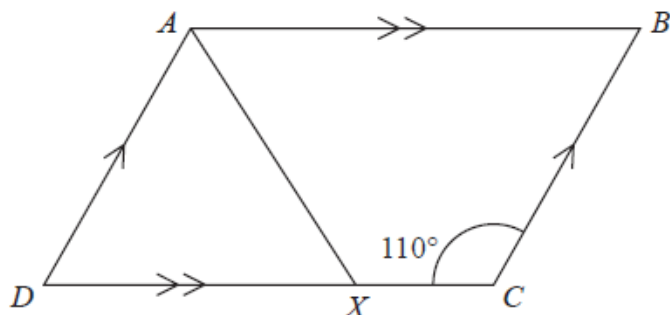


Diagram NOT accurately drawn

$ABCD$ is a parallelogram.
 Angle $DCB = 110^\circ$
 X is the point on DC such that AX bisects the angle DAB .

Calculate the size of angle AXC .

$\dots\dots\dots^\circ$

(Total for question = 4 marks)

Q9.

AC , BD and EDC are straight lines.

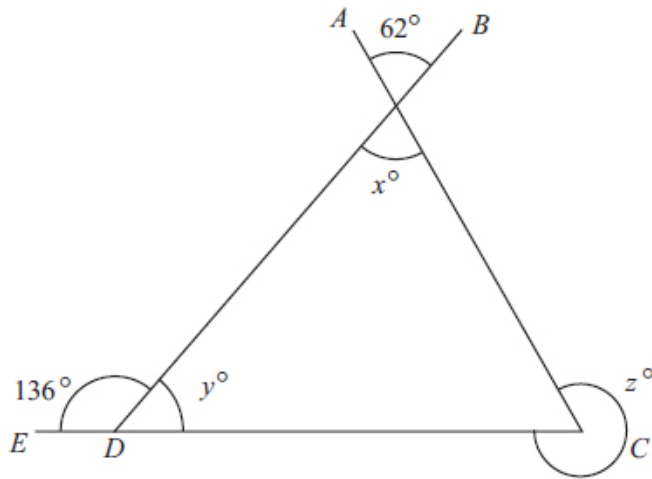


Diagram NOT accurately drawn

(a) (i) Find the value of x .

$x = \dots\dots\dots$

(ii) Give a reason for your answer.

.....
.....

(2)

(b) Find the value of y .

$y = \dots\dots\dots$

(1)

(c) Find the value of z .

$z = \dots\dots\dots$

(2)

(Total for question = 5 marks)