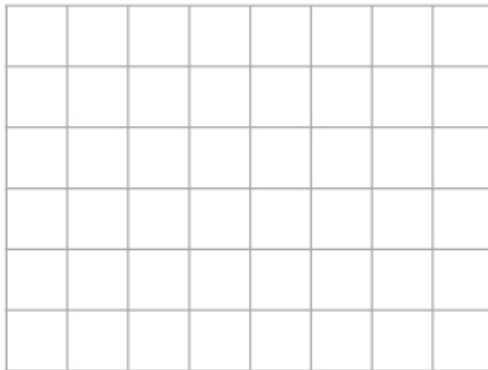


G021 Properties of 2D shapes

Q1.

(a) On the grid, draw a kite.



(1)

(b) Here is a quadrilateral.



Write down the special name of this quadrilateral.

.....

(1)

(Total for Question is 2 marks)

Q2.

Here is a list of names of some quadrilaterals.

square rectangle rhombus parallelogram trapezium

(a) Write down the names of the quadrilaterals that **must** have a right angle at each vertex.

.....

(1)

(b) Write down the names of the quadrilaterals that **must** have four sides the same length.

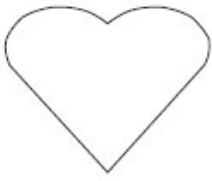
.....

(1)

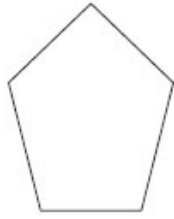
(Total for question = 2 marks)

Q3.

Here are five shapes.



A



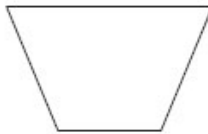
B



C



D



E

One of these shapes is a parallelogram.

(a) Write down the letter of this shape.

.....
(1)

One of these shapes has exactly **two** lines of symmetry.

(b) Which shape?

.....
(1)

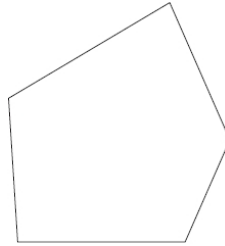
(c) Write down the order of rotational symmetry of shape **C**.

.....
(1)

(Total for Question is 3 marks)

Q4.

Here is a polygon.



(a) Write down the mathematical name of this polygon.

.....

(1)

Here is a straight line.



(b) In the space above, draw a line parallel to this line.

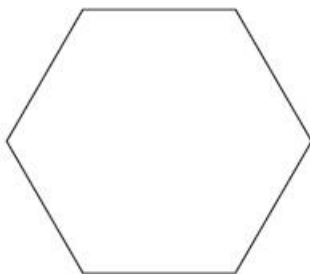
(1)

(Total for question = 2 marks)

Q5.

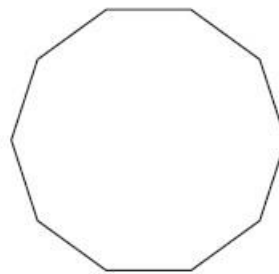
Write down the mathematical name of each of these polygons.

(i)



.....

(ii)

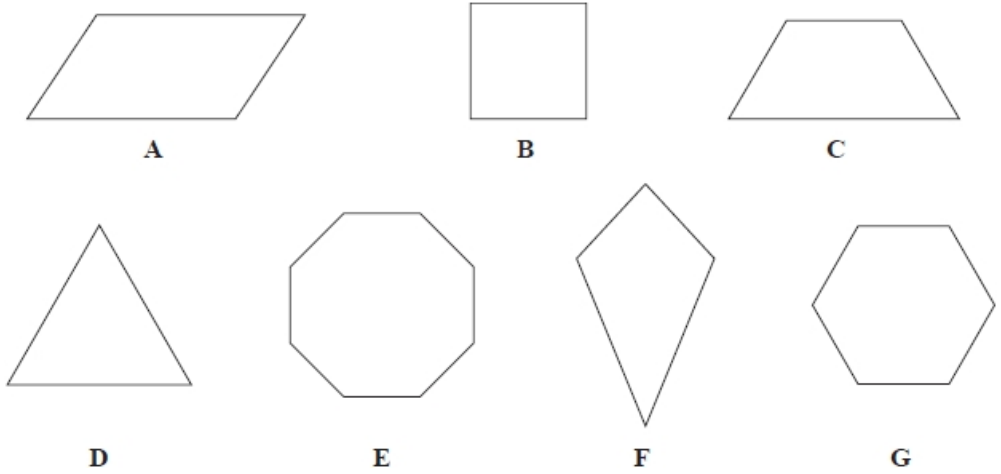


.....

(Total for Question is 2 marks)

Q6.

Here are seven shapes.



One of these shapes is a hexagon.

(a) Write down the letter of this shape.

.....
(1)

One of these shapes has no lines of symmetry.

(b) Write down the letter of this shape.

.....
(1)

(c) Write down the order of rotational symmetry of shape **E**.

.....
(1)

(Total for question = 3 marks)

Q7.

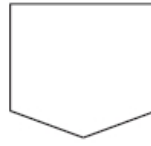
Here are nine shapes.



A



B



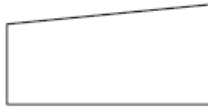
C



D



E



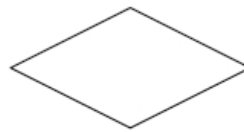
F



G



H



I

(a) Write down the letter of a shape that has exactly one line of symmetry.

.....
(1)

Two of these shapes have rotational symmetry of order 2 and no lines of symmetry.

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

..... and

(2)

Shape **D** is a polygon.

(c) Write down the mathematical name of this type of polygon.

.....
(1)

Shape **E** is a quadrilateral.

(d) Write down the mathematical name of this type of quadrilateral.

.....
(1)

(Total for Question is 5 marks)

Q8.

Here is a list of the names of five types of quadrilateral.

trapezium parallelogram square rhombus rectangle

(a) From the list, write down the names of two quadrilaterals which must have all four sides the same length.

..... (1)

trapezium parallelogram square rhombus rectangle

(b) From the list, write down the name of the quadrilateral that has only one pair of parallel sides.

..... (1)

trapezium parallelogram square rhombus rectangle

For one of these quadrilaterals,

- the corners are not right angles,
- the quadrilateral has rotational symmetry of order 2
- and the diagonals cross at right angles.

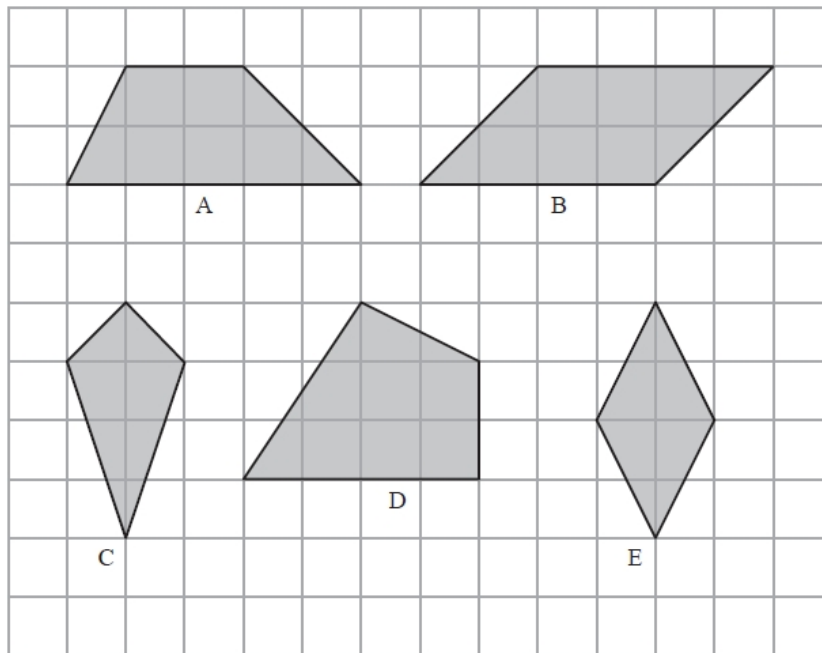
(c) Write down the name of this quadrilateral.

..... (1)

(Total for Question is 3 marks)

Q9.

Here are five shapes on a grid of squares.



(a) Write down the letter of the shape that is a rhombus.

.....
(1)

(b) How many lines of symmetry does shape C have?

.....
(1)

Two of the shapes have rotational symmetry of order 2

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

..... and
(1)

(Total for question = 3 marks)

Q10.

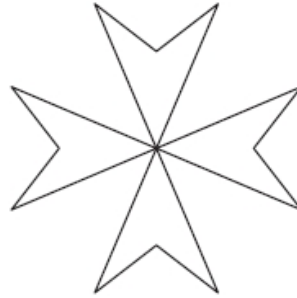
Here is a parallelogram.



(a) Write down the order of rotational symmetry of this parallelogram.

.....
(1)

Here is a shape.

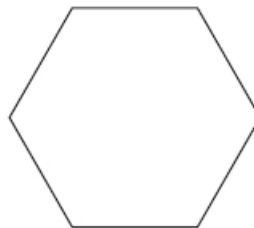


(b) Draw all the lines of symmetry on this shape.

(2)

(Total for question = 3 marks)

Q11.



(a) Write down the mathematical name of this polygon.

.....
(1)

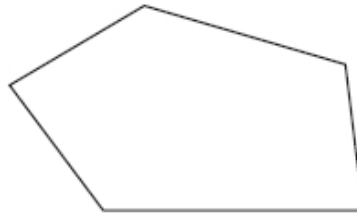
(b) How many sides has an octagon?

.....
(1)

(Total for question = 2 marks)

Q12.

Here is a polygon.



(a) Write down the mathematical name of the polygon.

.....
(1)

(b) Draw a sketch of a hexagon.

(1)

(c) In the space below, draw accurately a rectangle with a length of 5 cm and a width of 3 cm.

(2)

(Total for Question is 4 marks)

Q13.

Here is a quadrilateral.



(a) Write down the mathematical name for this quadrilateral.

.....

(1)

(b) Write down the order of rotational symmetry of this quadrilateral.

.....

(1)

(Total for question = 2 marks)