

5.1

Constructions and using measuring instruments

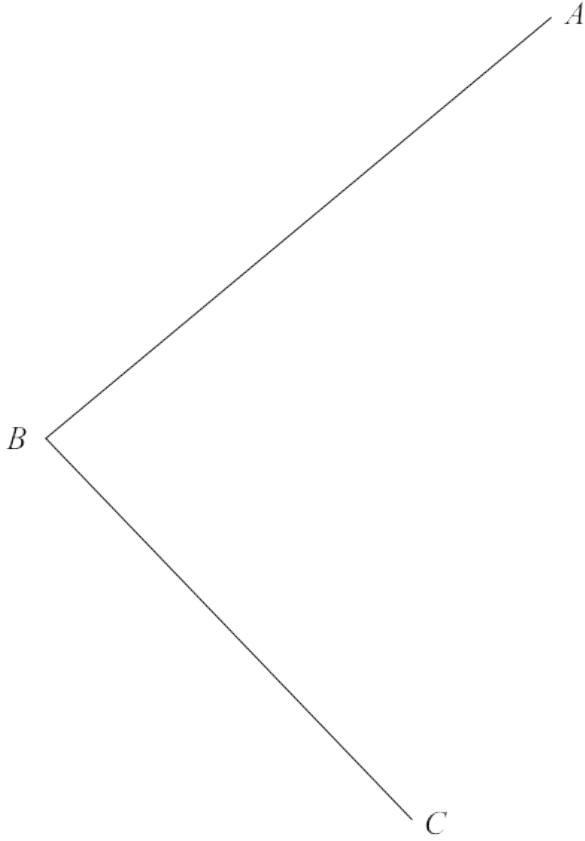
Mr Faruk

Teacher of Mathematics
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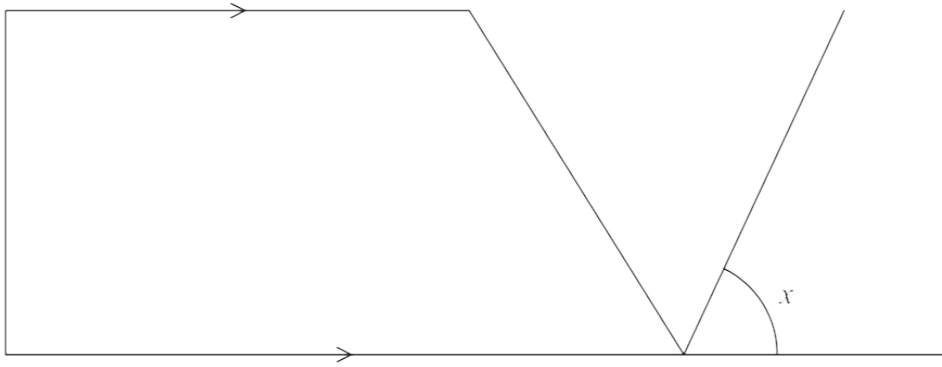
✉ cieigcsolutions@gmail.com



- 24 Use ruler and compasses only to construct the bisector of angle ABC .
You must show all your construction lines.



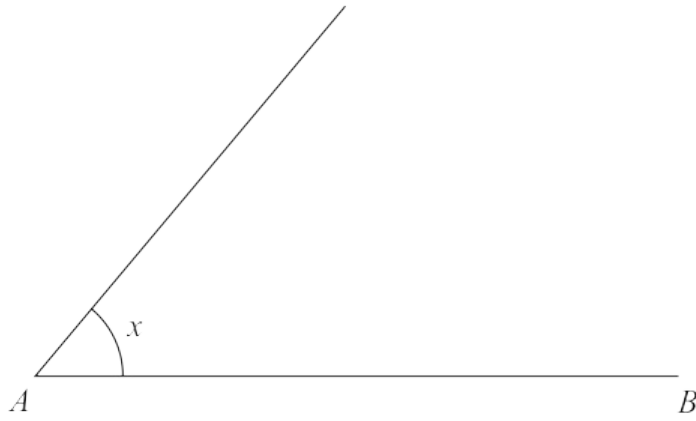
(Total for Question 24 is 2 marks)



(c) Measure the size of angle x .

.....
(1)

2



(a) Measure the length of the line AB .

State the units of your answer.

.....
(2)

(b) (i) What type of angle is the angle marked x ?

.....

(ii) Measure the size of the angle marked x .

.....
(2)

- 15 Use ruler and compasses only to construct the perpendicular bisector of the line AB .
You must show all of your construction lines.



(Total for Question 15 is 2 marks)

10 Here is a sketch of triangle ABC .

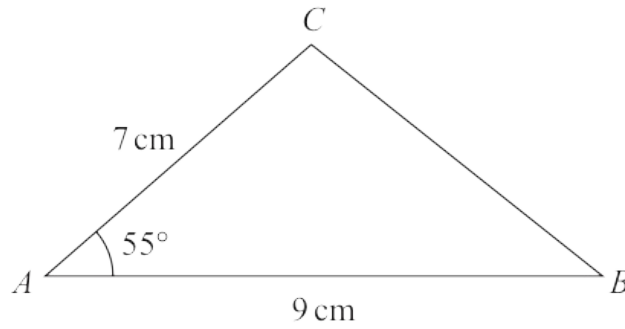
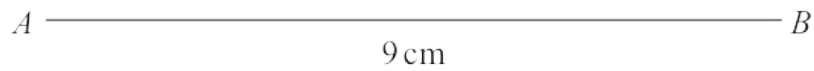


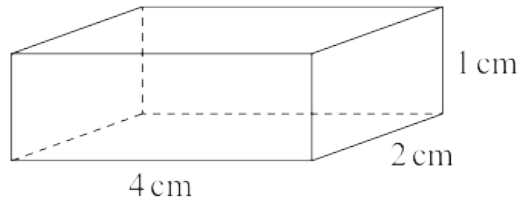
Diagram **NOT** accurately drawn

In the space below, make an accurate drawing of triangle ABC .
The line AB has been drawn for you.



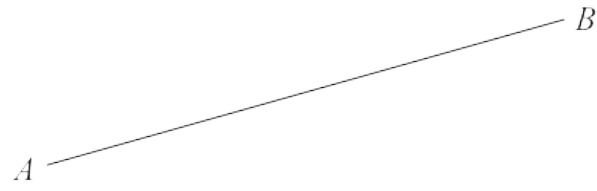
(Total for Question 10 is 2 marks)

6 (a) Write down the mathematical name of this 3-D shape.



.....
(1)

(b)



Measure the length of *AB*.

..... cm
(1)

10 ABC is an isosceles triangle.

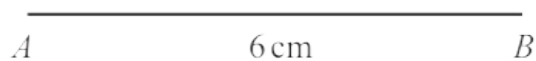
$$AB = 6 \text{ cm.}$$

$$AC = BC = 7 \text{ cm.}$$

(a) Use ruler and compasses to construct triangle ABC .

You must show all your construction lines.

The line AB has been drawn for you.



(2)

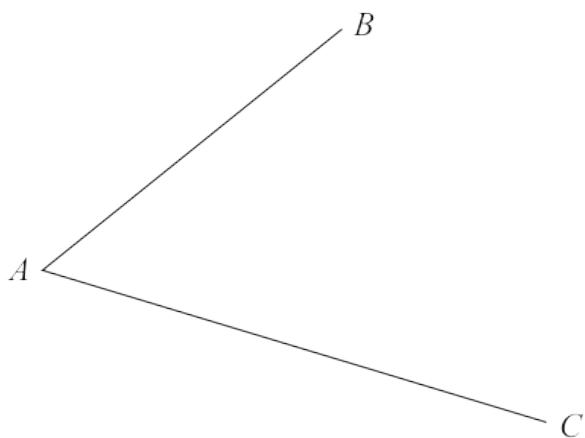
(b) Use ruler and compasses to construct the perpendicular bisector of the line DE .

You must show all your construction lines.



(2)

- 21 Use ruler and compasses to construct the bisector of angle BAC .
You must show all your construction lines.



(Total for Question 21 is 2 marks)

6

- (c) Using ruler and compasses only, in the space below construct the equilateral triangle ABC with sides of length 7 cm.
You must show all your construction lines.

Side AB has already been drawn for you.



(2)

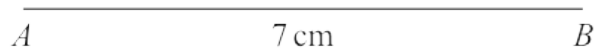
10 ABC is a triangle.

$AB = 7$ cm and $BC = 6.2$ cm

Angle $ABC = 65^\circ$

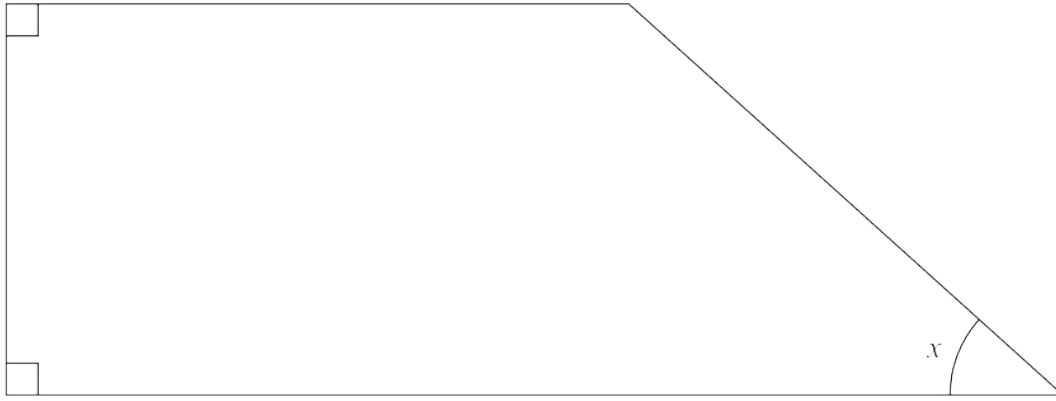
Draw accurately the triangle ABC .

The line AB has been drawn for you.



(Total for Question 10 is 2 marks)

3 Here is a quadrilateral.

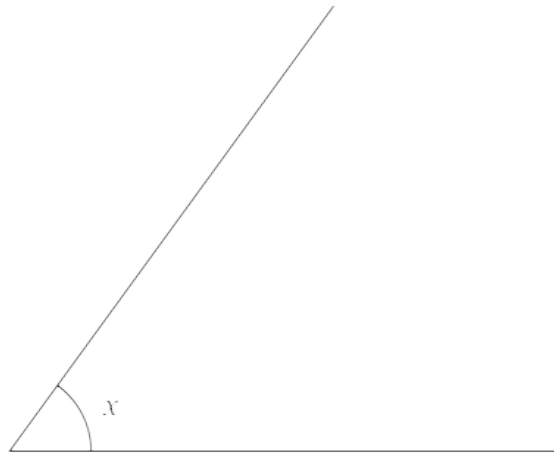


(b) Measure the size of the angle marked x .

.....
(1)

2 (a) Write down the order of rotational symmetry of a square.

.....
(1)

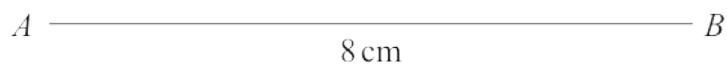


(b) (i) Measure the size of the angle marked x .

.....
○

- 9 ABC is a triangle.
 $AB = 8$ cm, $AC = 6$ cm and $BC = 9$ cm.

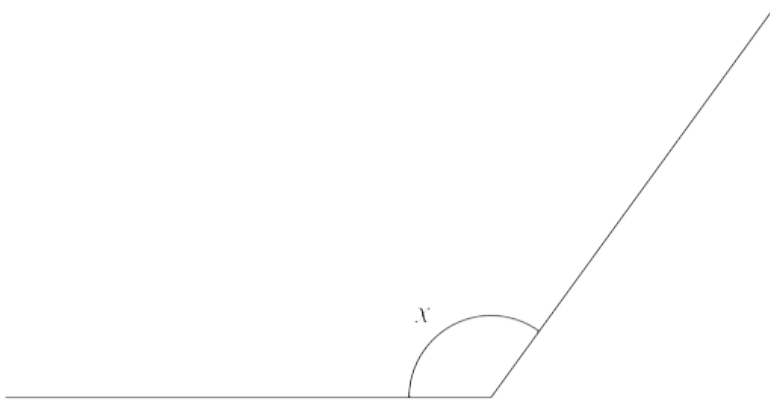
Use a ruler and compasses to construct the triangle ABC .
The side AB has been drawn for you.
You must show all your construction lines.



(Total for Question 9 is 2 marks)

5

(c) Find, by measuring, the size of the angle marked x



.....
(1)

11 Triangle ABC is an equilateral triangle of side 6 cm.

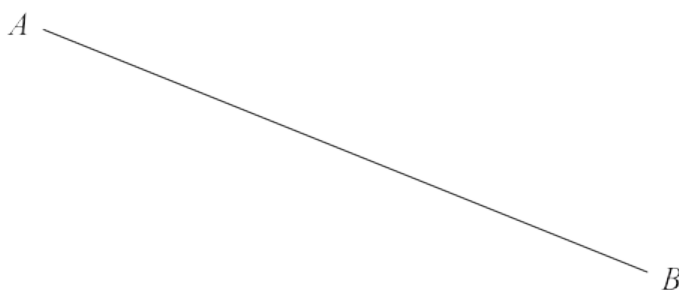
Using a ruler and compasses only, construct triangle ABC
You must show all your construction lines.

Side AB has been drawn for you.

A ————— B

(Total for Question 11 is 2 marks)

- 18** Use ruler and compasses only to construct the perpendicular bisector of line AB
You must show all your construction lines.

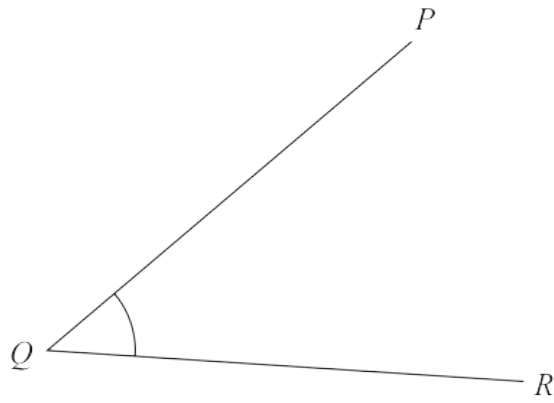


(Total for Question 18 is 2 marks)

4 (a) In the space below, draw a line of length 6.5 cm

(1)

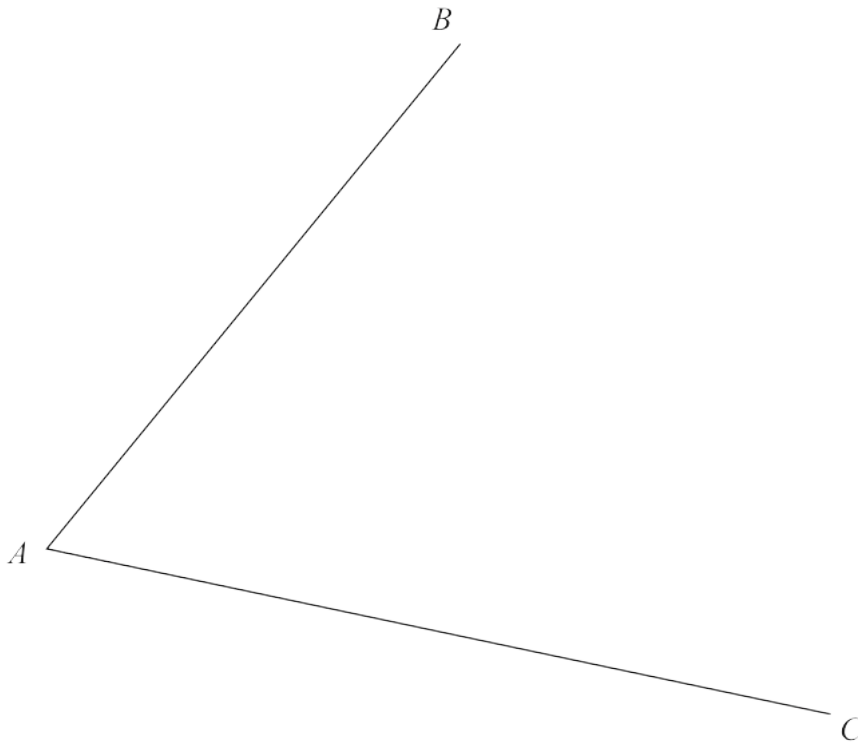
The diagram shows the straight lines QP and QR



(b) Measure the size of angle PQR

.....
(1)

- 18 Using ruler and compasses only, construct the bisector of angle BAC
You must show all your construction lines.



(Total for Question 18 is 2 marks)

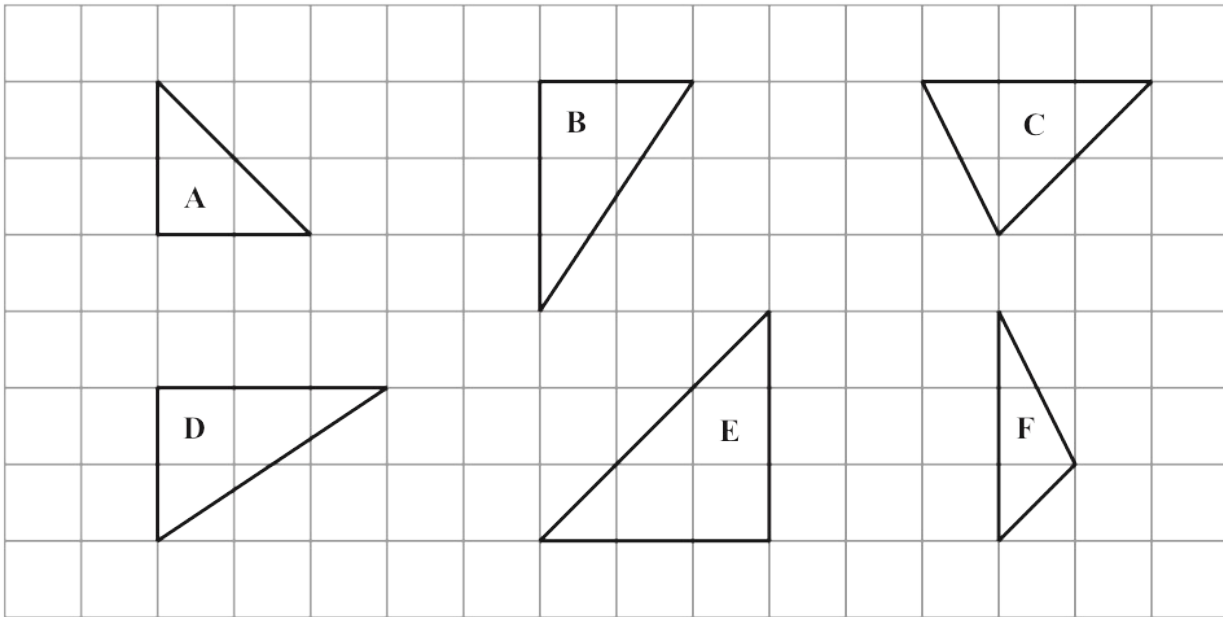
6

- (b) Measure the length of the line AB
Give your answer in centimetres.



..... cm
(1)

Here are six triangles drawn on a grid of squares.



Two of these triangles are congruent.

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

..... and

(1)

9 Here is a sketch of triangle ABC

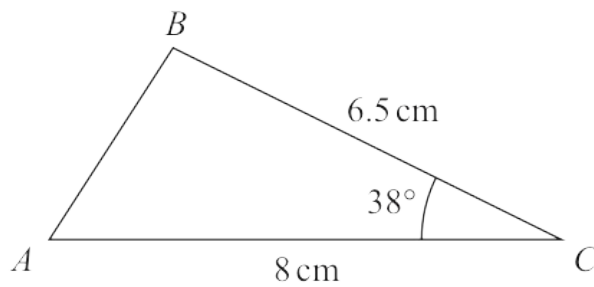


Diagram **NOT** accurately drawn

$AC = 8 \text{ cm}$ $BC = 6.5 \text{ cm}$ angle $ACB = 38^\circ$

In the space below, make an accurate drawing of triangle ABC
The line AC has been drawn for you.



(Total for Question 9 is 2 marks)
