



Scan for the solutions

Name: _____ **Date:** _____ **Score:** _____ / 31

- 1** Draw a line segment AB of length 8 cm.
Using a ruler and compasses only, construct the perpendicular bisector of AB.
You must show all your construction lines.

A _____ *B*

(2 marks)

Answer _____

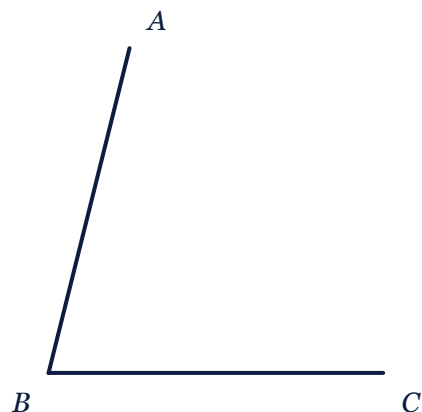
2

The diagram shows angle ABC.

Using a ruler and compasses only, construct the bisector of angle ABC.

You must show all your construction lines.

Then use a protractor to measure one of the two angles your bisector makes.



(2 marks)

Answer

- 3 Using a ruler and compasses only, construct an isosceles triangle ABC in which $AB = 7$ cm and $AC = BC = 5$ cm.

You must show all your construction arcs.



(2 marks)

Answer _____

- 4 Here is a sketch of an equilateral triangle with sides of 6 cm.

Using a ruler and compasses only, construct the triangle accurately in the space below. You must show all your construction arcs.

Write down the size of each angle in your triangle.

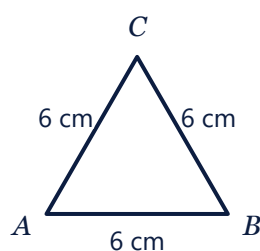


Diagram NOT accurately drawn

(2 marks)

Answer _____

5

Draw a straight line 10 cm long. Mark a point M on the line, about halfway along.

Using a ruler and compasses only, construct the line perpendicular to the line at the point M.

You must show all your construction lines.



(2 marks)

Answer

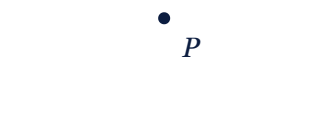
- 6 The diagram shows a line AB.
Using a ruler and compasses only, construct an angle of 60° at A.
You must show all your construction arcs.



(2 marks)

Answer _____

- 7 Draw a straight line 10 cm long. Mark a point P about 4 cm above the line.
Using a ruler and compasses only, construct the perpendicular from P to the line.
You must show all your construction lines.



(2 marks)

Answer _____

8

The diagram shows a straight line with a point A marked on it.
Using a ruler and compasses only, construct an angle of 45° at A.
You must show all your construction lines.



(3 marks)

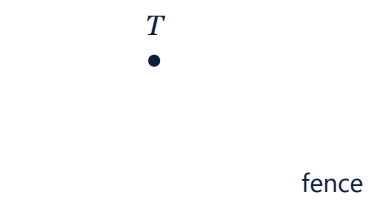
Answer

9

The diagram shows a tree T in a field and a straight fence.

Ellie wants to walk from the tree to the fence by the shortest possible route.

- Using a ruler and compasses only, construct the shortest route from T to the fence. You must show all your construction lines.
- Explain why this route is the shortest.



(3 marks)

Answer

10 Here is a sketch of triangle ABC.

$AB = 7 \text{ cm}$, $AC = 5 \text{ cm}$ and angle $BAC = 60^\circ$.

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

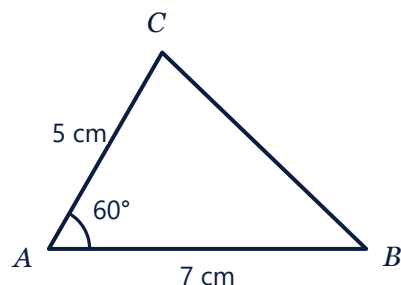


Diagram NOT accurately drawn

(3 marks)

Answer _____

11

Here is a sketch of triangle PQR.

$PQ = 8 \text{ cm}$, angle $QPR = 45^\circ$ and angle $PQR = 60^\circ$.

- Using a ruler and compasses only, construct triangle PQR accurately. You must show all your construction lines.
- Work out the size of angle PRQ. Check your answer by measuring your drawing.

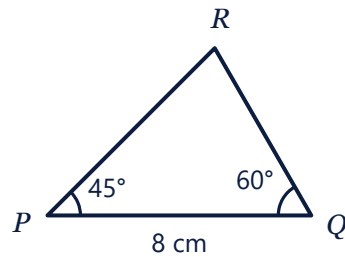


Diagram NOT accurately drawn

(4 marks)

Answer _____

12

PQRS is a rhombus. Each side of the rhombus is 5 cm long. The diagonal PR is 8 cm long.

- Using a ruler and compasses only, construct the rhombus PQRS accurately. You must show all your construction arcs.
- Measure the length of the other diagonal, QS.

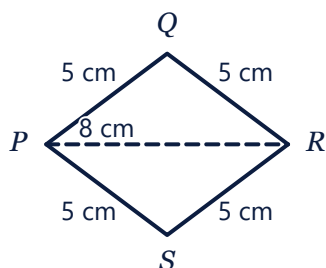


Diagram NOT accurately drawn

(4 marks)

Answer _____

End of questions | Total 31 marks