



Name: _____ **Date:** _____ **Score:** _____ / 34

- 1** A pupil is constructing a 60° angle at point P on a straight line. She puts the compass point on P , sets the radius to 5 cm and draws an arc that crosses the line at Q . She keeps the compasses at 5 cm, puts the point on Q and draws a second arc that crosses the first arc at R .

Explain why angle RPQ is 60° .

(2 marks)

Answer _____

- 2** Farida wants to construct a triangle with sides 3 cm, 4 cm and 8 cm using a ruler and compasses.

Explain why she cannot.

(2 marks)

Answer _____

- 3** Describe, step by step, how to construct a triangle with sides 6 cm, 8 cm and 9 cm using only a ruler and compasses.

(3 marks)

Answer _____

- 4** Describe, step by step, how to construct an angle of 60° at a point P on a straight line, using only a ruler and compasses.

(3 marks)

Answer _____

5

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.



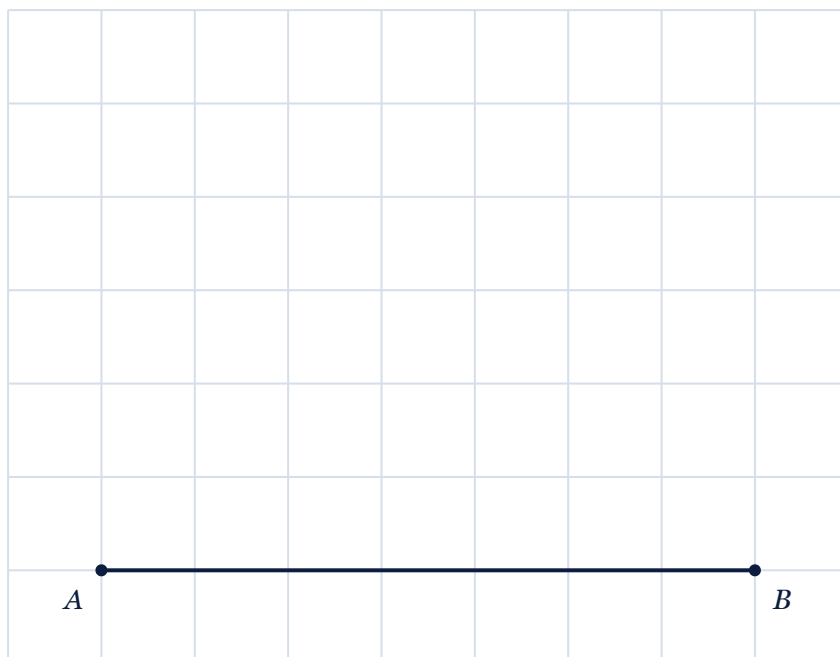
(2 marks)

Answer

6

The diagram shows the line AB on a square grid. AB is 7 squares long.

Using a ruler and compasses only, construct triangle ABC with $AC = 6$ squares and $BC = 5$ squares. Use the grid to set your compasses. You must show all your construction arcs.



(3 marks)

Answer _____

- 7 The diagram shows a straight line and a point P on it.

Using a ruler and compasses only, construct an angle of 60° at the point P . Show your construction arcs.



(3 marks)

Answer _____

- 8 Describe how to construct an angle of 30° at a point P on a straight line, using only a ruler and compasses. (Hint: start with a 60° angle.)

(3 marks)

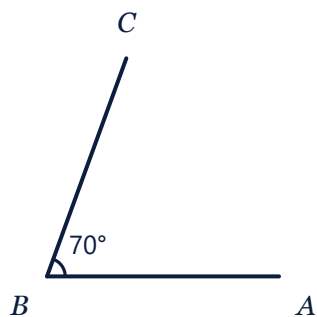
Answer _____

- 9 A triangle is constructed with sides 5 cm, 7 cm and 9 cm.
Which angle is the largest? Give a reason.

(2 marks)

Answer _____

- 10** Draw an angle ABC of 70° using a protractor, where B is the vertex of the angle.
Using a ruler and compasses only, construct the bisector of angle ABC.
You must show all your construction lines.



(2 marks)

Answer _____

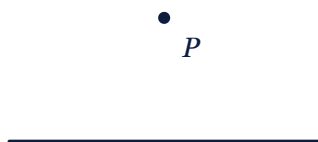
- 11** Describe how to construct an angle of 45° at a point P on a straight line, using only a ruler and compasses.

(3 marks)

Answer _____

12

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

- 13** 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

- 14 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.

A  *B*

(2 marks)

Answer 

End of questions | Total 34 marks