

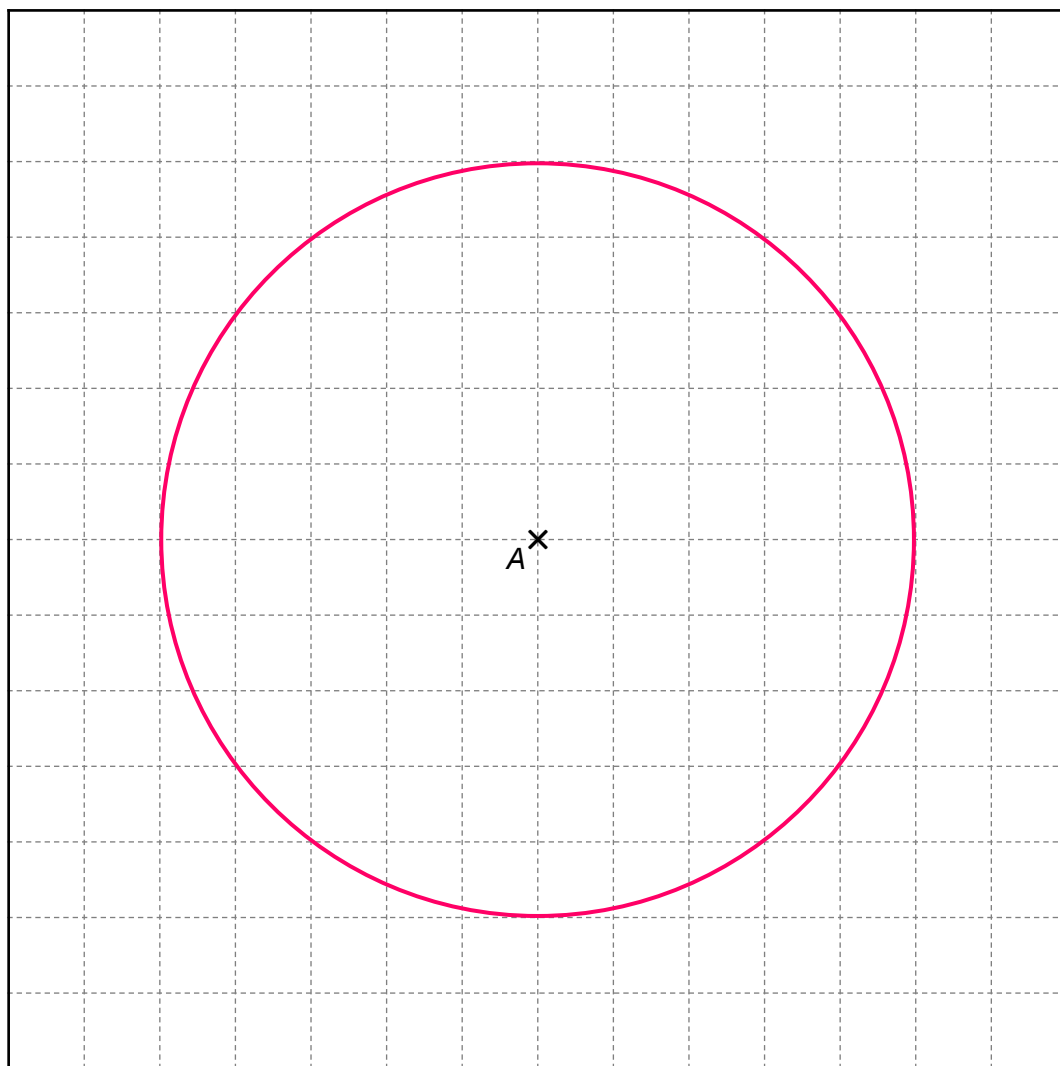


Loci - PRINT THIS ON A4



REVISE THIS
TOPIC

- 1 The point A is shown on a square centimetre grid. [1 mark]
- Construct the locus of points that are exactly 5 cm away from the point A.



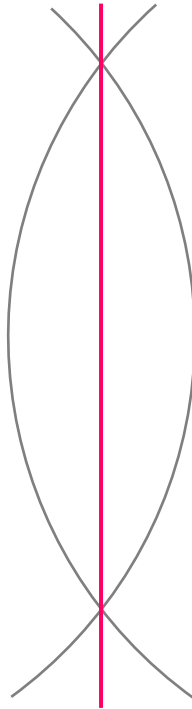


- 2 Construct a locus of points that are the same distance from points A and B .

[2 marks]

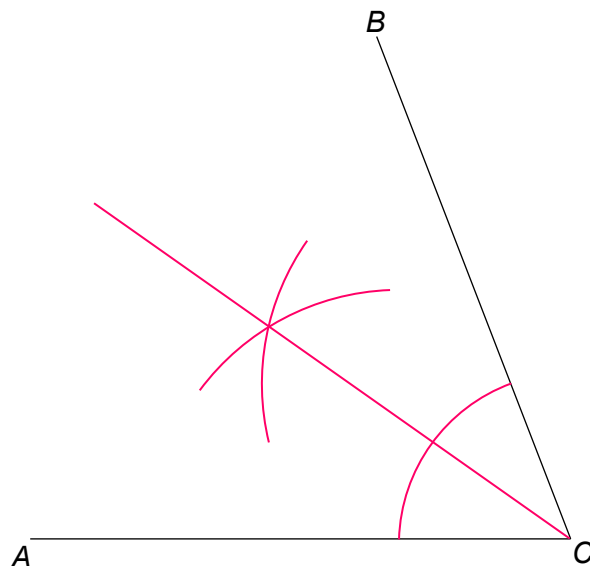
$\bullet$
 A

$\bullet$
 B



- 3 Construct a locus of points that are the same distance from lines AC and BC .

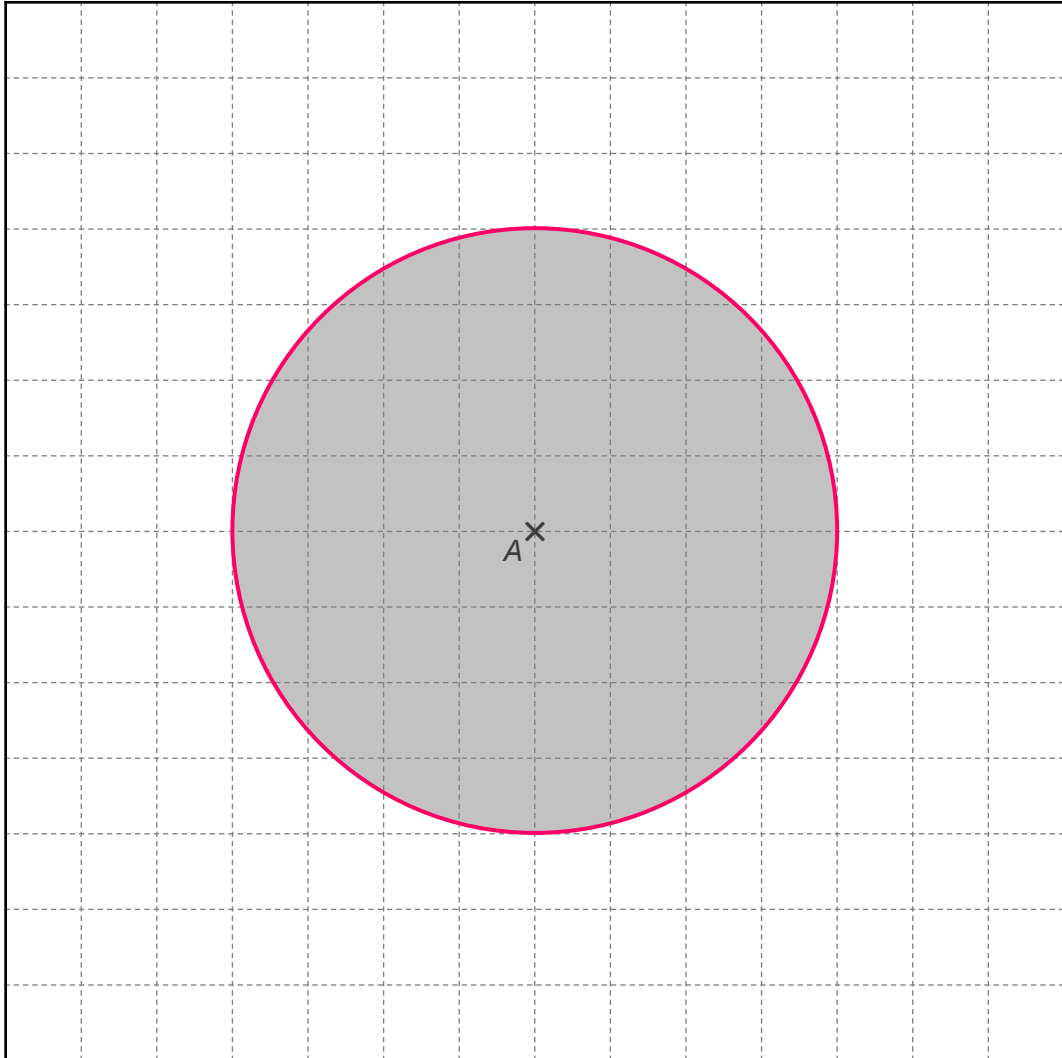
[2 marks]





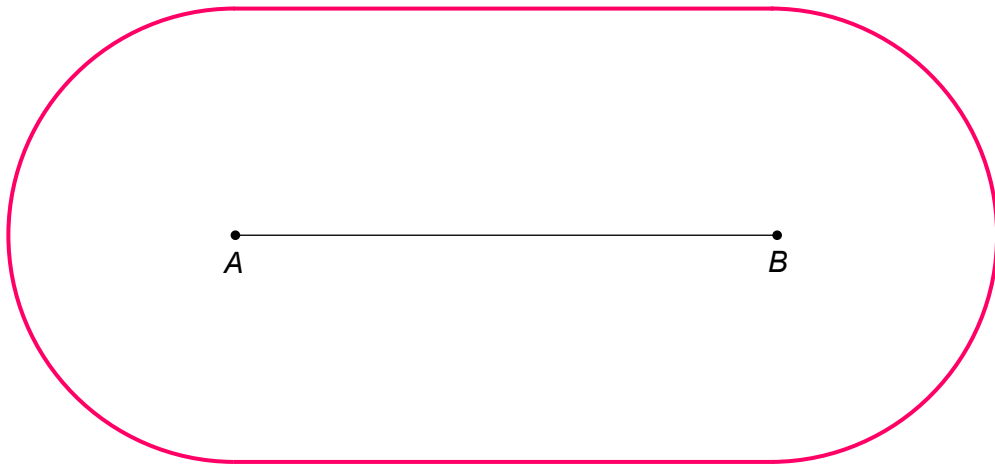
4 The point A is shown on a square centimetre grid. [1 mark]

Construct the locus of points that are less than 4 cm away from the point A.

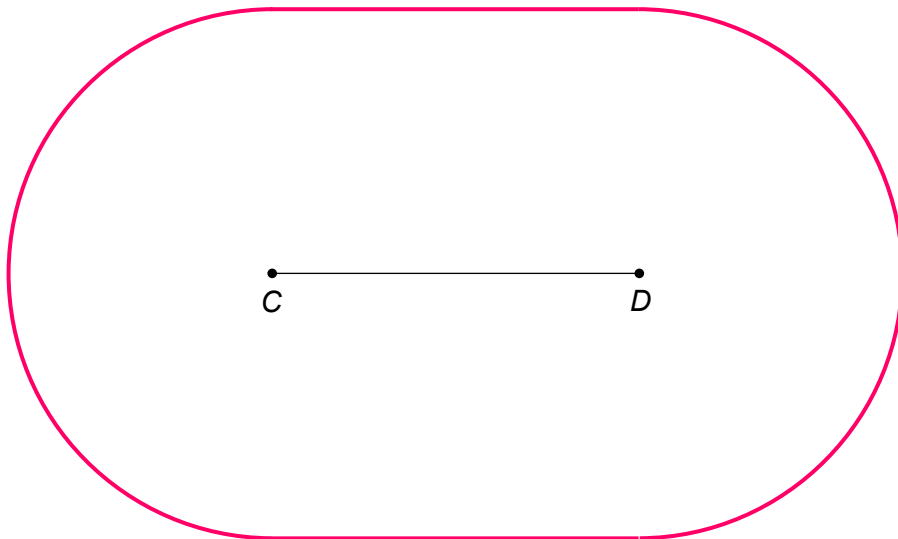




- 5 Construct the locus of points that are exactly 3 cm away from the line AB . [2 marks]



- 6 Construct the locus of points that are less than 3.5 cm away from the line CD . [2 marks]





7 The square centimetre grid below shows points A , B and C .

Show the region inside the grid that is

less than 4 cm from A

and

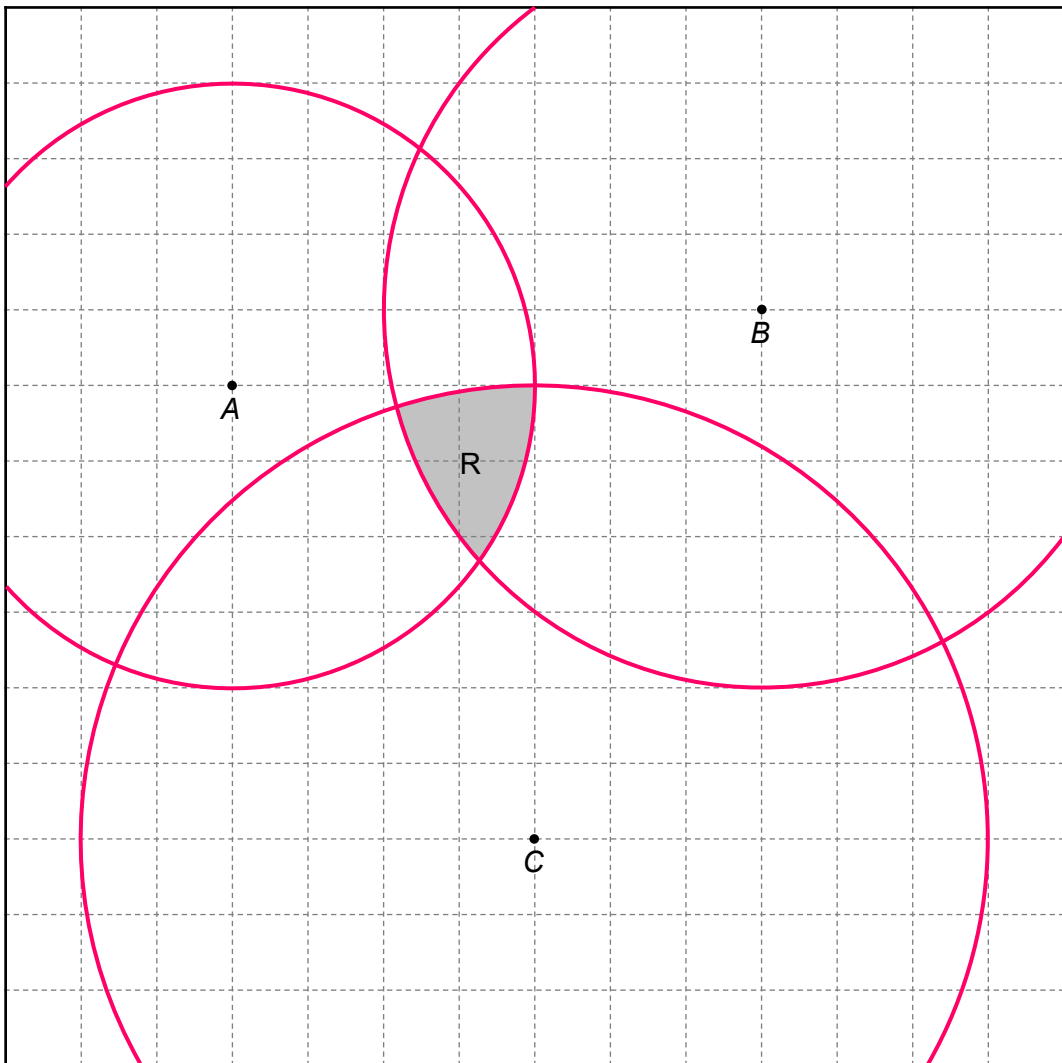
less than 5 cm from B

and

less than 6 cm from C

Label the region R .

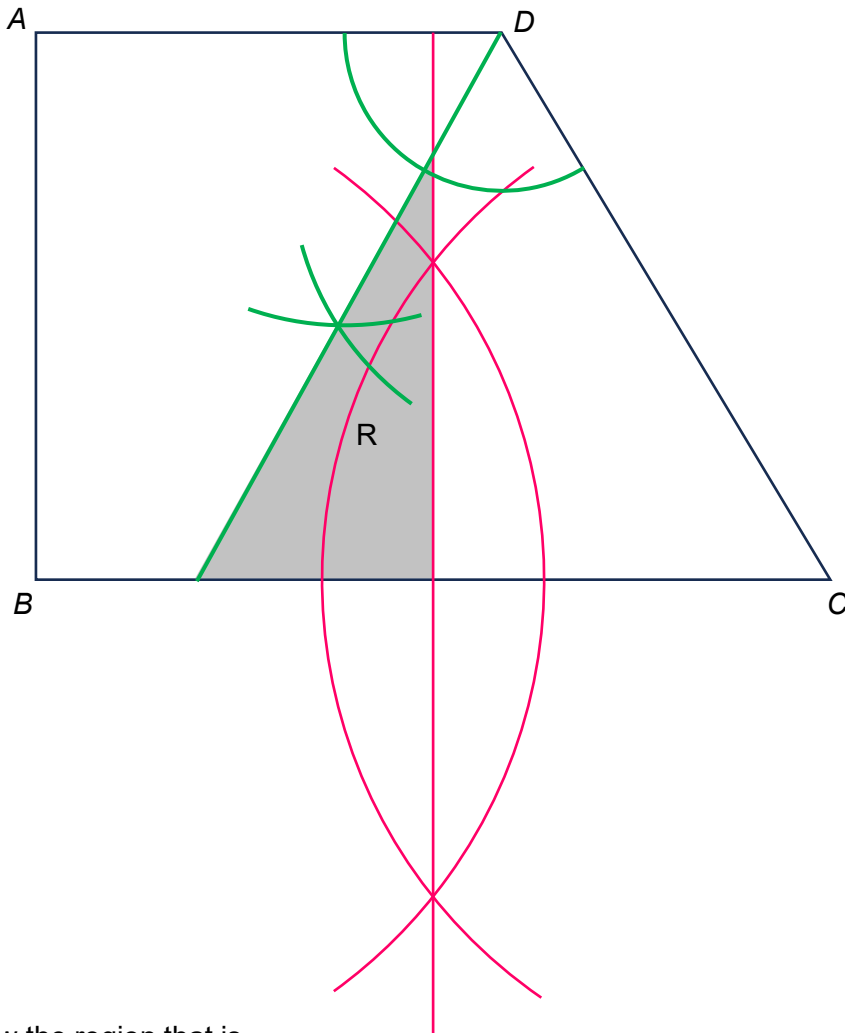
[3 marks]





8 Use a ruler and compasses in this question.

$ABCD$ is a quadrilateral.



Show the region that is
inside the quadrilateral $ABCD$
and
closer to point B than to point C
and
closer to line CD than to line AD

Label the region R .

Show all your construction lines.

[4 marks]

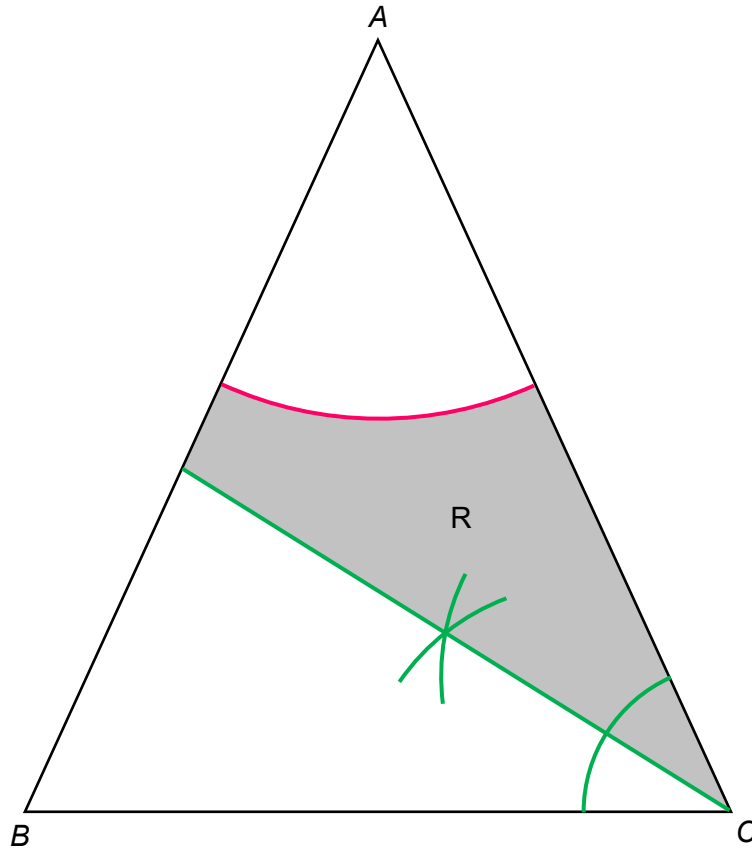




9

Use a ruler and compasses in this question.

ABC is an isosceles triangle.



Show the region that is
inside the isosceles triangle ABC
and
more than 5 cm away from the point A
and
closer to line AC than to line BC

Label the region R .

Show all your construction lines.

[4 marks]

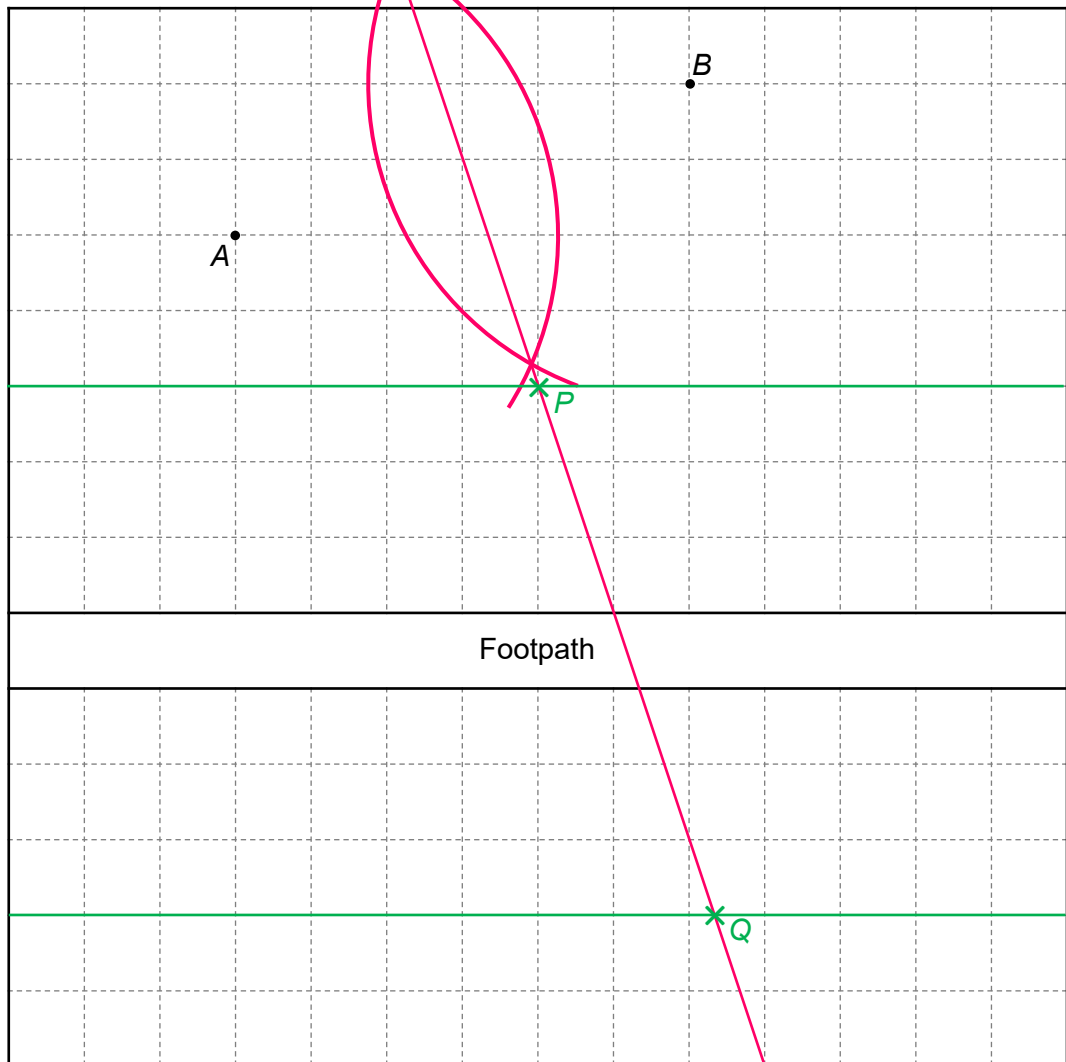




10

The square centimetre grid below shows a map of a park.
Points A and B represent the locations of trees.

Scale: 1 cm represents 2 m



A new tree is to be planted in that park that is
an equal distance away from the two trees at points A and B
and
exactly 6 m away from the edge of the footpath.

Using a ruler and a pair of compasses, identify the two possible locations for
the new tree.

Label the locations P and Q .

[4 marks]

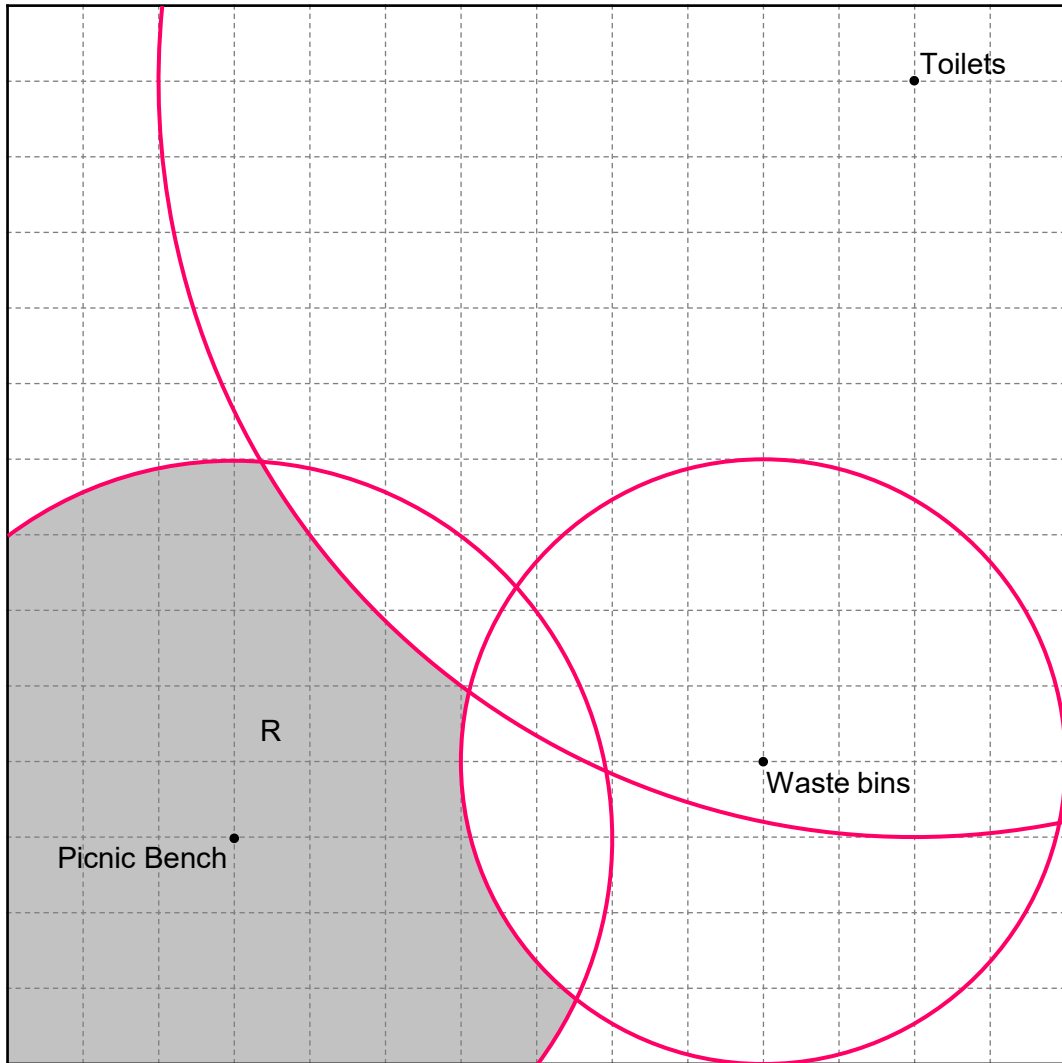




11

The square centimetre grid below shows a map of a camp site.

Scale: 1 cm represents 20 m



A camper wishes to pitch their tent so that it is
within 100 m of picnic bench
and
at least 80 m from the waste bins
and
at least 200 m from the toilets.

Using a ruler and a pair of compasses, show the region that the camper can pitch their tent.

Label the region R.

[4 marks]

8

Turn over ►

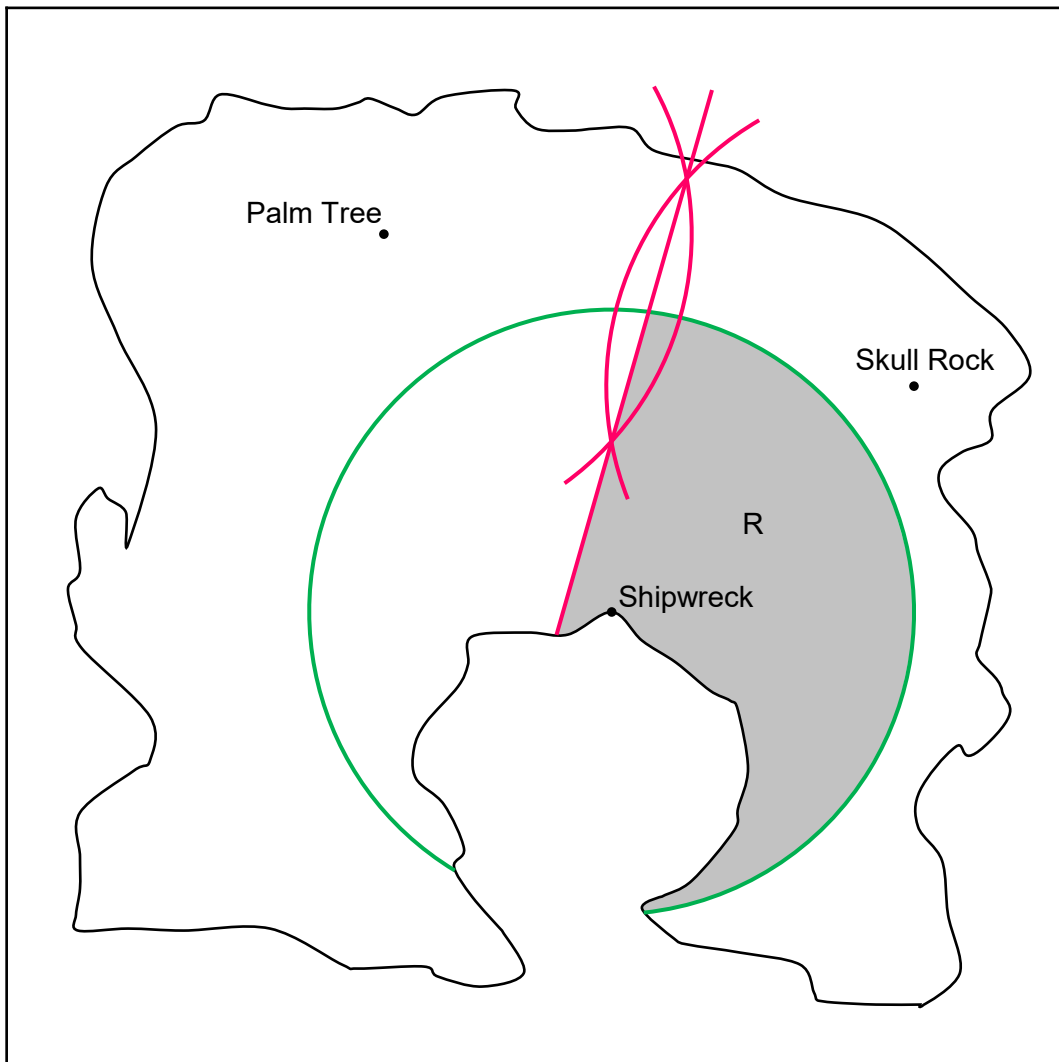




12 Use a ruler and compasses in this question.

The scale diagram shows a map of an island.

Scale: 1 cm represents 3 km



Treasure is buried on the island so that it is
less than 12 km away from the Shipwreck
and
closer to Skull Rock than the Palm Tree

Label the region, R, where the treasure could be.

Show all your construction lines.

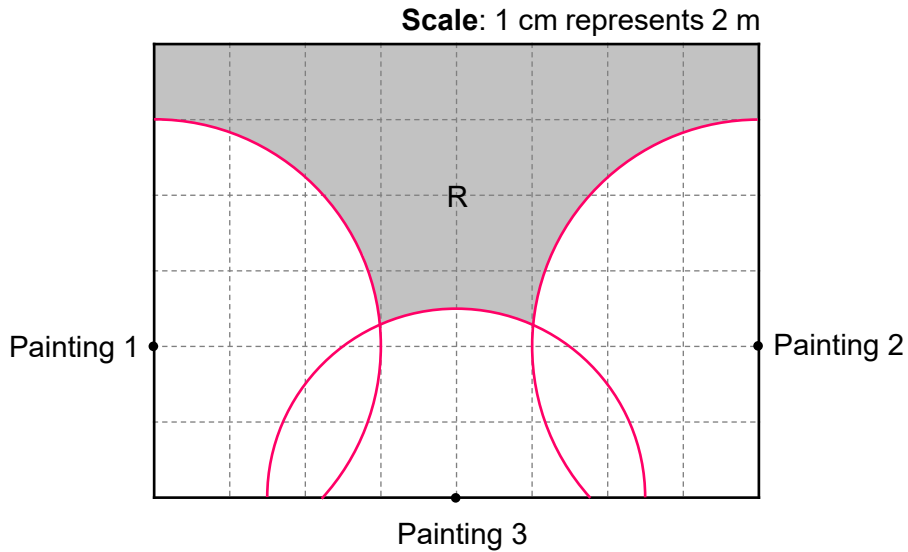
[4 marks]





13

The square centimetre grid below shows the layout of a room in a museum.



For security reasons visitors are **not allowed** to stand

within 6 m of Painting 1 or Painting 2

or

within 5 m of Painting 3

Label the region inside the room, R, where visitors are **allowed** to stand.

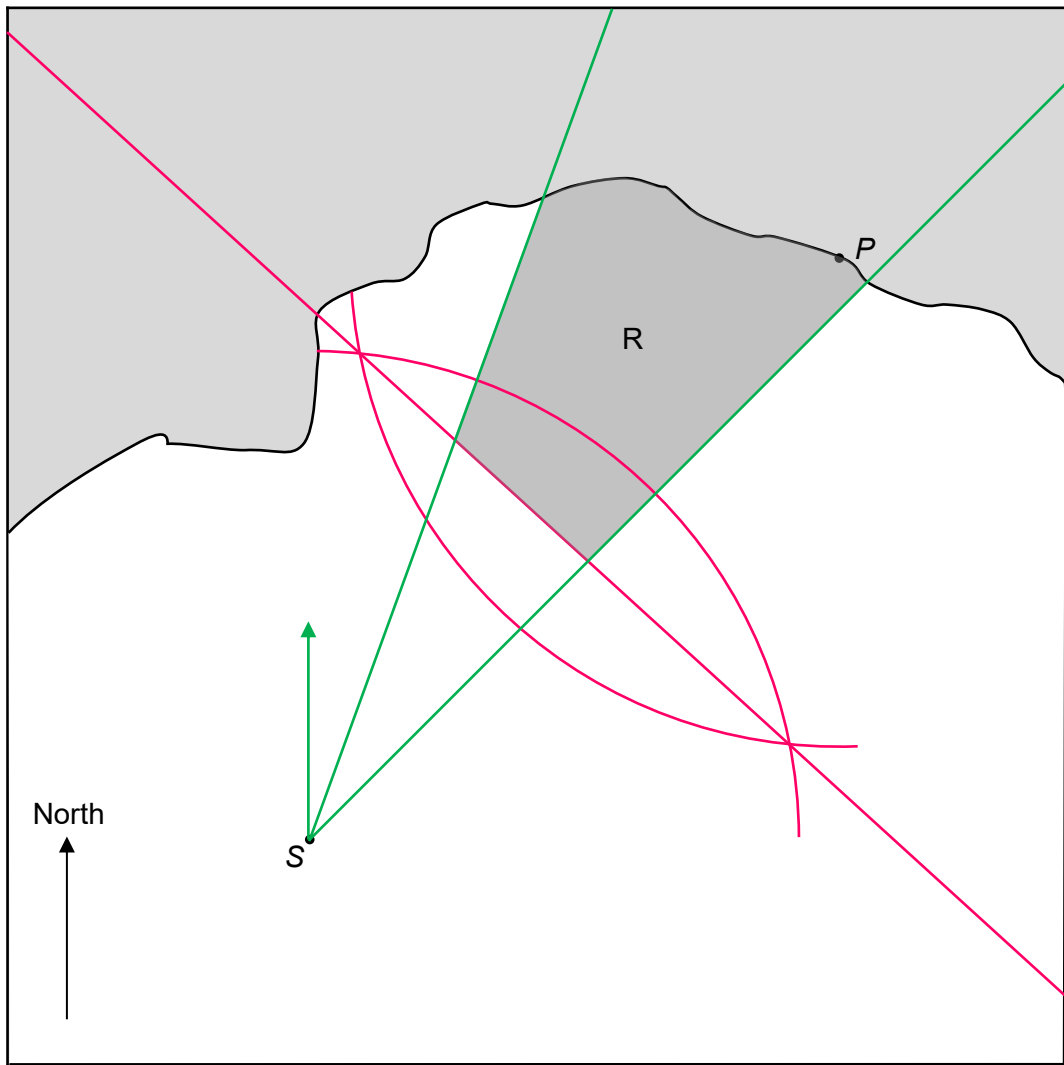
[3 marks]





14

The diagram shows ship S and port P.



A fishing boat located in the water that is

closer to the port than the ship

and

between a bearing of 020° and 045° from the ship

Label the region, R, where the fishing boat could be located.

Show all your construction lines.

[4 marks]

