

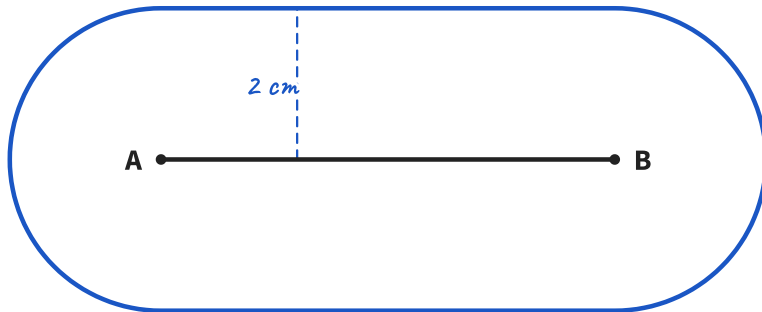
Loci: a Fixed Distance

ANSWERS

1

Straight sides, then round ends.

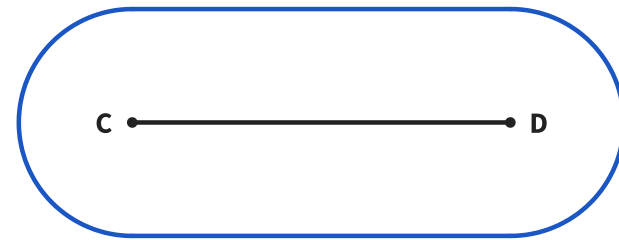
Draw the locus of points that are 2 cm from the line segment AB.



2

Draw the straight sides first.

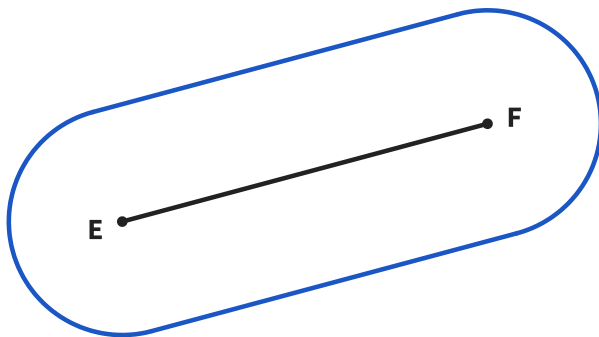
Draw the locus of points that are 1.5 cm from the line segment CD.



3

Draw the straight sides first.

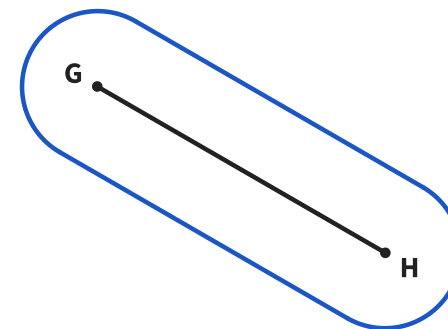
Draw the locus of points that are 1.5 cm from the line segment EF.



4

Draw the straight sides first.

Draw the locus of points that are 1 cm from the line segment GH.

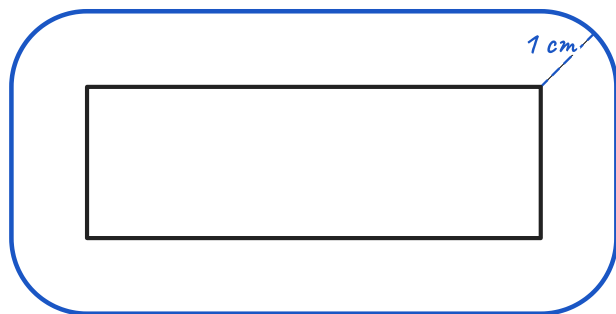


Loci: a Fixed Distance

ANSWERS

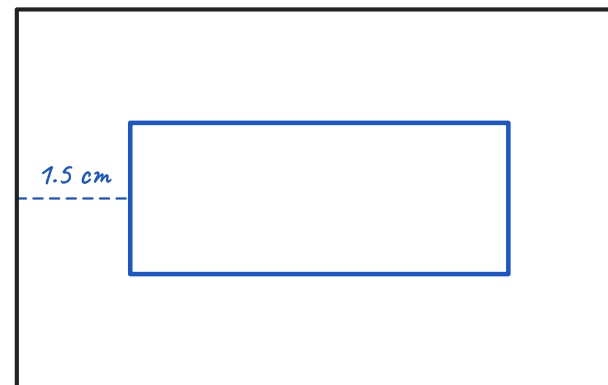
5 Notice the change!

Draw the locus of points outside the rectangle that are 1 cm from it.



6

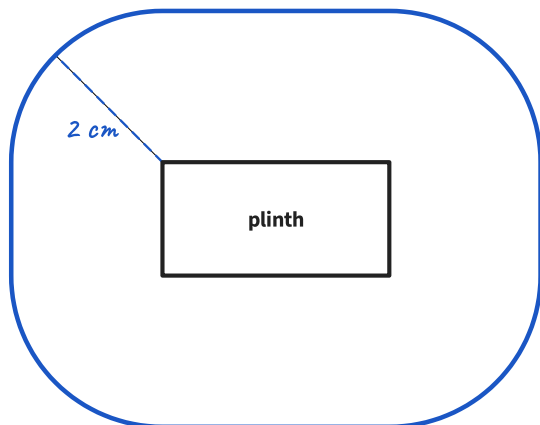
Draw the locus of points inside the rectangle that are 1.5 cm from it.



7

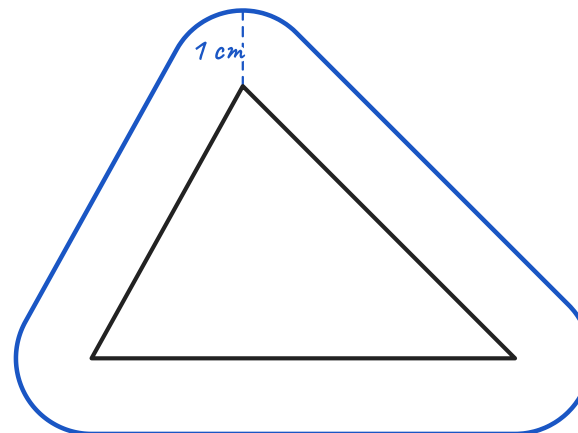
Scale: 1 cm represents 1 m

A rope goes all the way round a statue's plinth, 2 m from it. Draw where the rope goes.



8

Draw the locus of points outside the triangle that are 1 cm from it.

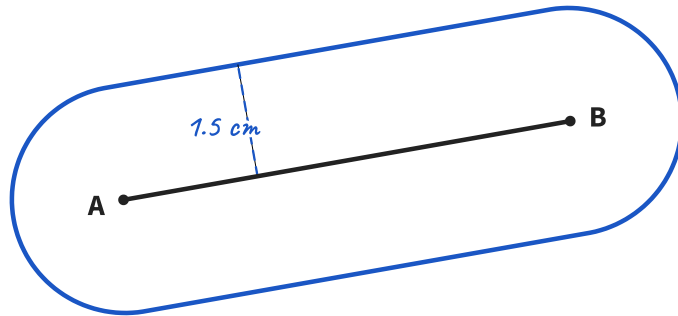


Loci: a Fixed Distance *further practice*

ANSWERS

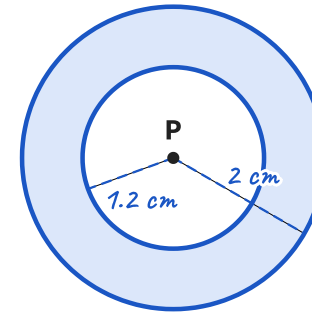
9

Draw the locus of points that are 1.5 cm from the line segment AB.



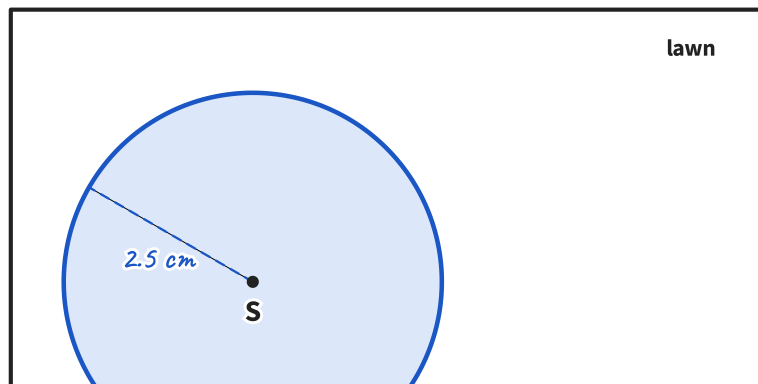
10

Shade the region that is more than 1.2 cm from P and less than 2 cm from P.



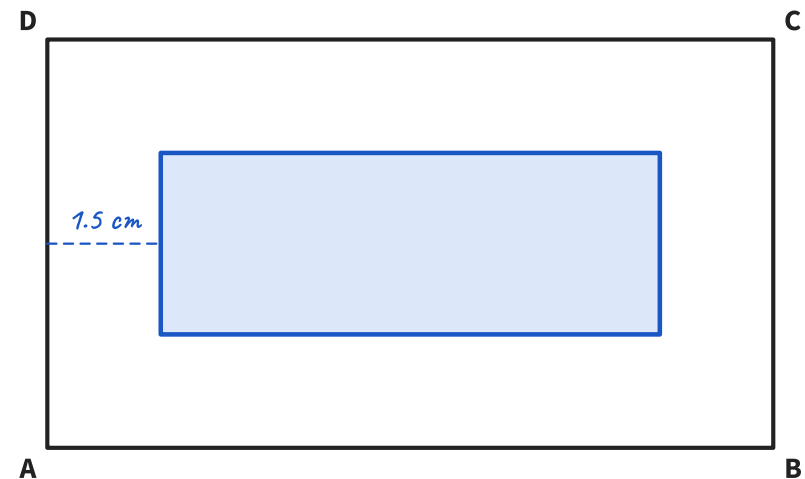
11

A sprinkler at S waters the lawn up to 5 m away. Scale: 1 cm represents 2 m. Shade the part of the lawn it waters.



12

Shade the region inside the rectangle that is more than 1.5 cm from every side.

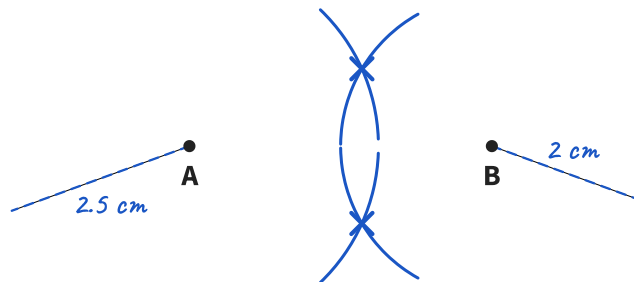


Loci: a Fixed Distance *further practice*

ANSWERS

13

A hiker is exactly 25 km from radio mast A and exactly 20 km from radio mast B. Scale: 1 cm represents 10 km. Mark each place the hiker could be. How many places are there?

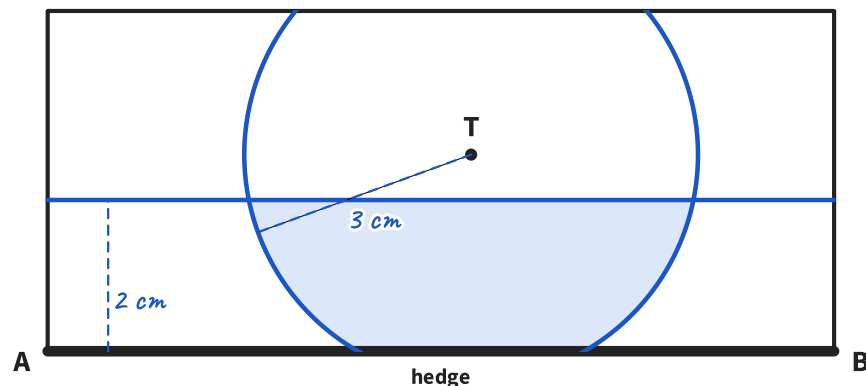


Answer

There are 2 places.

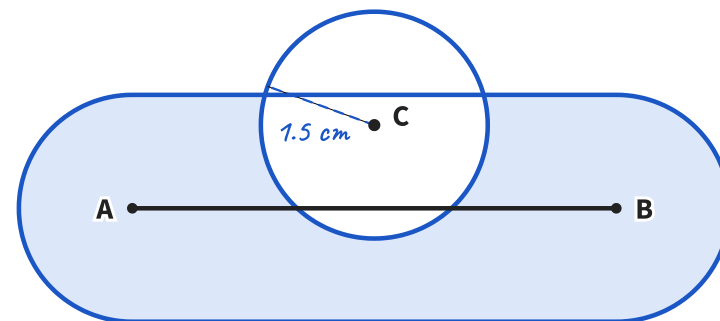
15

Treasure is buried in the field. It is less than 30 m from the tree T and less than 20 m from the hedge AB. Scale: 1 cm represents 10 m. Shade where the treasure could be.



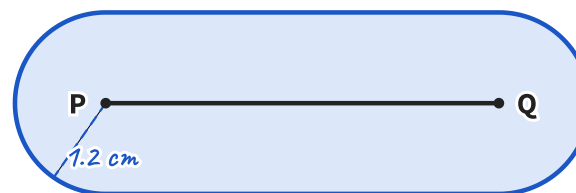
14

Shade the region that is less than 1.5 cm from the line segment AB and more than 1.5 cm from the point C.



16

Kai says the region less than 1.2 cm from the line segment PQ is a rectangle. Shade the region. Explain why Kai is wrong.



Answer

Past P and Q the nearest point is P or Q itself, so the ends are semicircles, not square corners.