

Maths

# Loci Around a Point

Mr Bond



# Loci around a point

1. Which diagram shows the locus of points that are 2 cm from point A?

Diagram 1

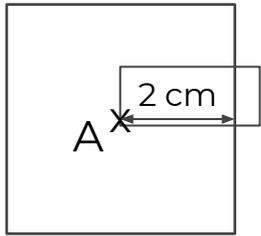
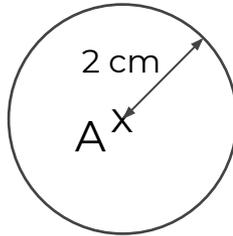


Diagram 2



C<sup>x</sup>

Explain your answer.



## Loci around a point

3. Factory B can be built anywhere within a 20 mile radius of factory A. Using the scale 1 cm = 5 miles, draw the locus of points to define the region where factory B could be built.

Factory A  $\times$

4. A circular path around a pond is 2 metres wide. The pond has a diameter of 32 metres. Using the scale 1 cm = 4 m draw a diagram to show the locus of points to define where the path is.



# Answers



# Loci around a point

1. Which diagram shows the locus of points that are 2 cm from point A?

Diagram 1

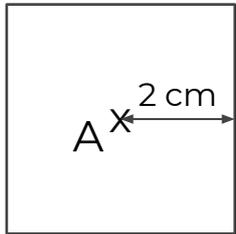
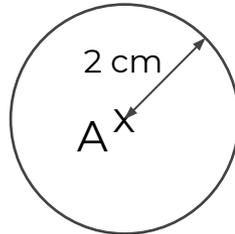


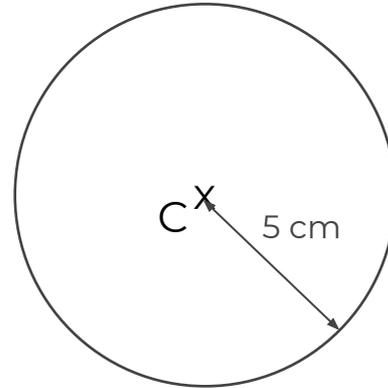
Diagram 2



Explain your answer.

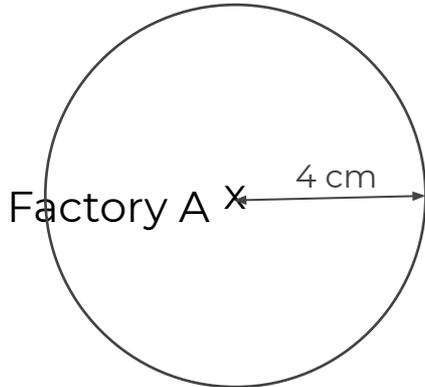
Diagram 2 because in diagram 1 the distance between point A and the vertex of the square will be more than 2 cm

2. Draw the locus of points that are 5 cm from point C



## Loci around a point

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4. A circular path around a pond is 2 metres wide. The pond has a diameter of 32 metres. Using the scale 1 cm = 4 m draw a diagram to show the locus of points to define where the path is.

