

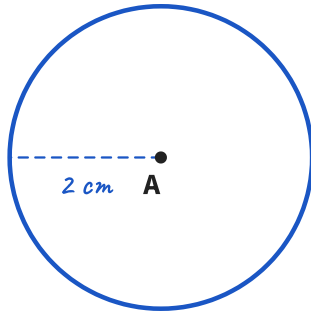
Using Compasses: Circles and Arcs

ANSWERS

1

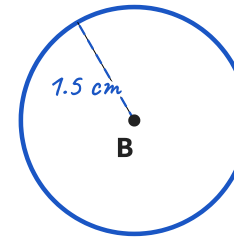
Set the compasses on a ruler.

Draw all the points that are 2 cm from A.



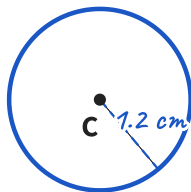
2

Draw all the points that are 1.5 cm from B.



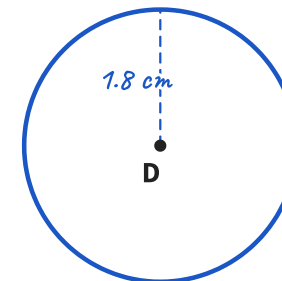
3

Draw all the points that are 1.2 cm from C.



4

Draw all the points that are 1.8 cm from D.

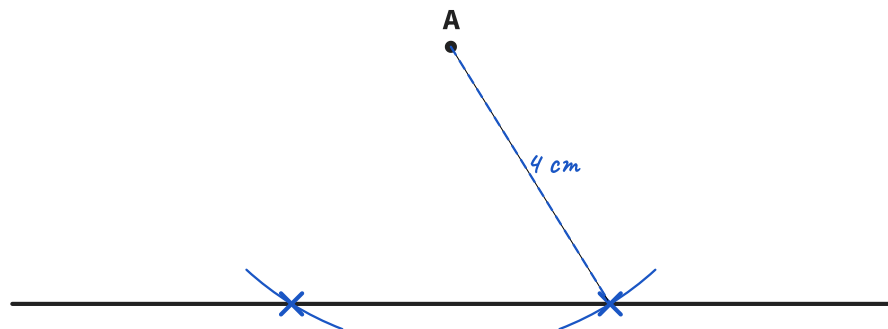


Using Compasses: Circles and Arcs

ANSWERS

5 Notice the change!

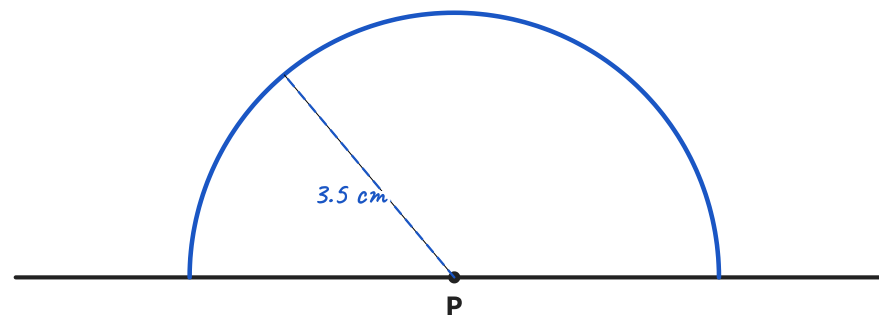
Mark the two points on the line that are exactly 4 cm from A.
How far apart are they?



Answer 4.2 cm (accept 4 to 4.4)

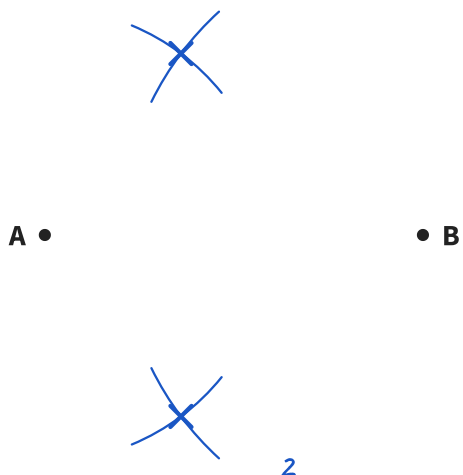
6

Draw all the points that are 3.5 cm from P and above the line.



7

Mark the points that are 3 cm from A and 4 cm from B.
How many points are there?

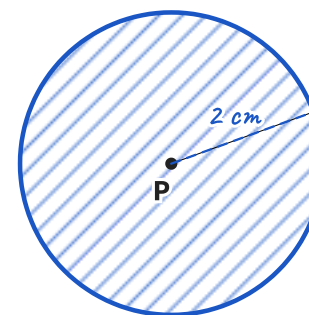


Answer 2

8

Scale: 1 cm represents 2 m

A dog is tied to a post P with a lead 4 m long.
Shade the region the dog can reach.

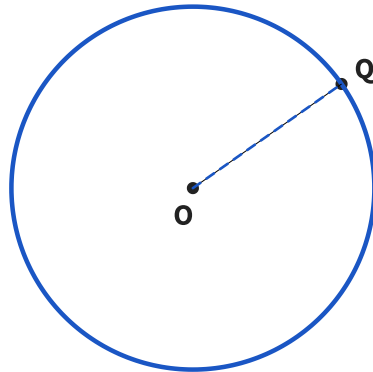


Using Compasses: Circles and Arcs *further practice*

ANSWERS

9

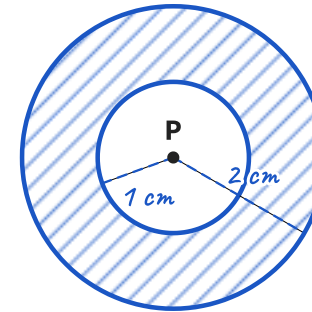
Draw the circle with centre O that goes through the point Q. Measure its radius.



Radius = 2.4 cm (accept 2.2 to 2.6)

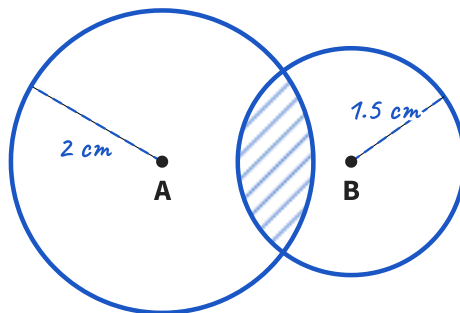
10

Shade the region that is more than 1 cm from P and less than 2 cm from P.



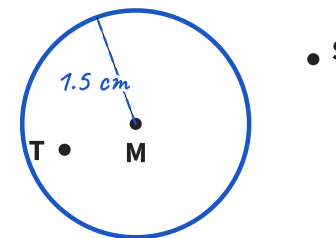
11

Shade the region that is less than 2 cm from A and less than 1.5 cm from B.



12

A radio mast M sends a signal up to 15 km. Draw the edge of the signal.
Which town, S or T, gets the signal?
Scale: 1 cm represents 10 km



Answer T. It is less than 1.5 cm from M.

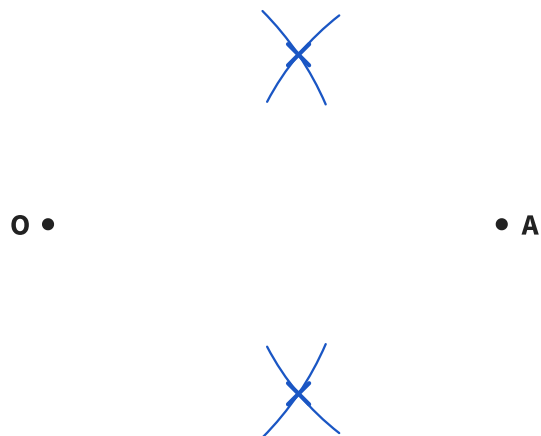
Using Compasses: Circles and Arcs *further practice*

ANSWERS

13

A bench is 40 m from the oak tree O and 35 m from the ash tree A. Mark the places the bench could be.

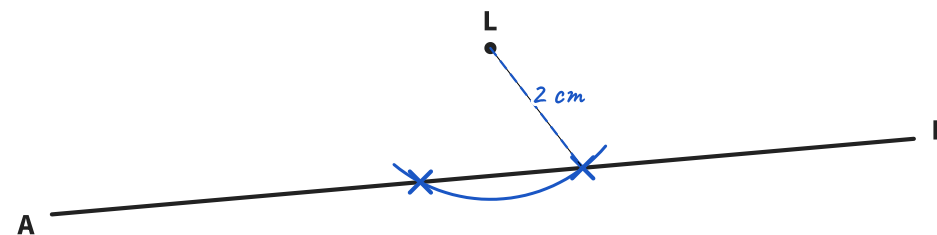
Scale: 1 cm represents 10 m



14

A ship sails along the route AB. It can see the lighthouse L from up to 20 km away. Mark where the ship can first see L and where it loses sight of it. How far does it sail in sight of L?

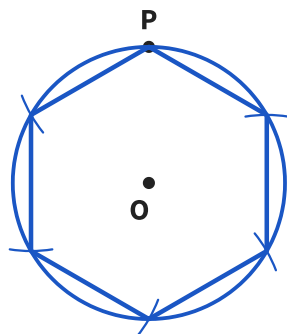
Scale: 1 cm represents 10 km



Answer 21.6 km (accept 19.6 to 23.6)

15

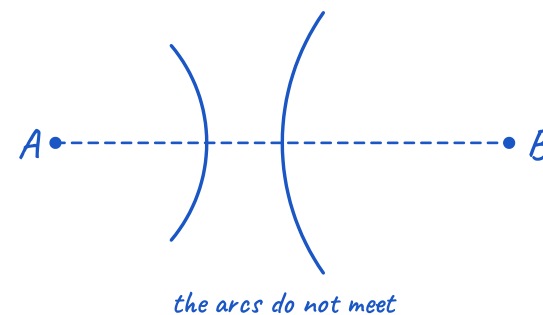
Draw a circle, radius 1.8 cm, centre O. Keep the compasses the same and step round the circle from P, marking points. Join them. What shape do you make?



Answer A regular hexagon

16

A and B are 6 cm apart. Sam says there is a point that is 2 cm from A and 3 cm from B. Try to draw it, then explain why Sam is wrong.



Answer 2 + 3 = 5, which is less than 6, so the circles never meet.