

Task 1 – Draw a new point A for each question

- (a) Draw the locus of points 4cm from a point A.
- (b) Shade the region of points more than 2cm from A.
- (c) Shade the region of points less than 5cm from A.
- (d) Shade the region that is less than 6cm from A but more than 3cm from A.

Task 2 – Draw Point C and D 6cm apart

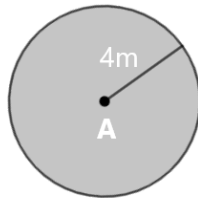
- (a) Shade the region **less than** 2cm from C AND **less than** 5cm from D.
- (b) Shade the region **less than** 3cm from C AND **more than** 4cm from D.
- (c) Shade the region **more than** 2cm from C AND **more than** 3cm from D.

Task 3 – Draw points X and Y 5cm apart

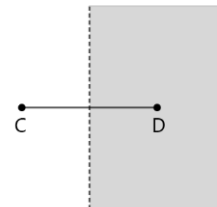
- (a) Draw the locus of points **equidistant** from X and Y.
- (b) Shade the region **CLOSER** to Y than X.
- (c) Shade the region **less than** 4cm from X AND **closer** to Y than X.
- (d) Shade the region **more than** 2cm from X AND **closer** to X than Y.
- (e) Draw the locus of points that are the **same distance** from X AND Y AND exactly 3cm from X.

Task 4 – Describing Loci

(a) Describe the locus of points below:

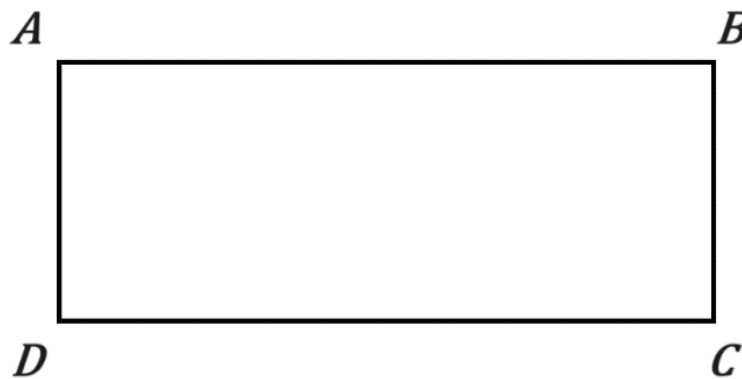


(b) Describe the locus of points below



Task 5 Exam Style Questions

(a) The diagram below shows field *ABCD*. An XL Bully is on an 60m rope tethered at *B*. A human is somewhere in the field exactly 40m from *D*. Using the scale 1cm = 10m, show the any area where the human is safe from the dog.



(b) The diagram below shows two points, *P* and *Q*. Show the two points that are 3cm from BOTH points.

P.

.Q

Task 6 – Worded Questions

- (a) A pizza delivery company offer free delivery within a 5-mile radius of their shop (S). Using 1cm = 1 mile, draw the locus of points that the shop will deliver to.
- (b) Fred has a dog on a chain in one corner of a rectangular yard that measures 6m by 7m. The chain measures 6m in length. Fred also has chickens that can roam freely no further than 5m from the corner diagonally opposite. Using 1cm = 1m show all the points where the chickens are safe from being eaten by the dog.