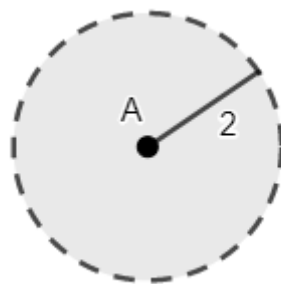**Loci – www.m4ths.com – Steve Blades**

(1) Draw the point A. Shade the locus of points less than 3cm from A

(2) Draw the point B. Shade the locus of points more than 4cm from B but less than 5cm from B.

(3) Draw the line CD of length 6cm. Shade the locus of points less than 5cm from C and less than 2cm from D

(4) Draw the line EF of length 7cm. Shade the locus of points more than 4cm from E but less than 4cm from F

(5) Draw the line GH of any length. Shade the locus of points closer to H than G

(6) Draw the line IJ of length 9cm. Shade the region closer to J than I and more than 6cm from I

(7)* Draw the line KL of length 8cm. Find the point that is equidistant from K and L and between 6cm and 7cm from L

(8) M and N are radio masts that are 5km away. The signal from Mast M covers an area of radius 4km and Mast N 3km. Shade the region where there is no signal. Use the scale 1cm = 1km

(9) A horse is tied to a rope in the corner of a rectangular fenced field measuring 30m by 50m. The length of the rope is 40m. Using the scale 1cm = 10m, show where the horse can roam in the field.

(10)* Shade the locus of points that are more than 6cm but less than 8cm from the point O and on a bearing of 070°

(11)* P and Q are 2 points. Find the point that is equidistant from P and Q and on a bearing of 050° from P

(12)* M is the path that is on a bearing of 120° from N and between 4 and 5cm from N. Show M on a diagram.

(13) Describe fully the locus represented below



(14) Describe fully the locus represented below