(a) Mark all of the points more than 3cm away from A but no more than 2cm away from B.
(b) Show the locus of point equidistant from B and A

\[ \text{B} \quad \text{A} \]

Show the region that is closer to C than B and no more than 4km from B (Use the scale 1cm = 1km)

\[ \text{C} \]

\[ \text{B} \]

(a) Treasure is buried due west of Island D and no more than 2miles from Island C Show below where the treasure could be. Use the scale 0.5mile = 1 cm.
(b) Joe is 1 mile from the treasure. Show where he could be.

\[ \text{D} \]

\[ \text{C} \]

Treasure is buried no more than 4km from Island E and no more than 3km from Island F. It is also due north east of P. Show the locus of points the treasure could be on using the scale 2cm = 1km.

\[ \text{F} \]

\[ \text{E} \]

\[ \text{P} \]
(a) 3 polluting chimneys G, H and I are shown below. Show where Jim (J) can stand and avoid smoke if chimney
G has a range of 150m, H has a range of 200m and I has a range of 150m (use the scale 1cm = 50 m).
(b) Bob claims he is at the point equidistant from I and G AND equidistant from I and H. Where should he be
standing?

Shade all the points closer to L than M that are more than 6cm from M and more than 3cm from L.

Extension

Set up a locus problem to give to a friend involving an equidistant point and a range. Check that it works before you
give it to them!