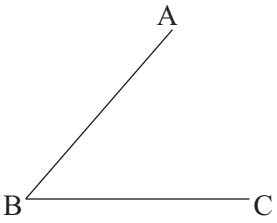
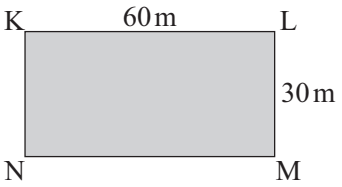
TASK **4.22**

You will need a ruler and a pair of compasses.

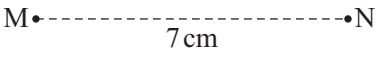
1. Construct the locus of points which are the same distance from the lines AB and BC (the bisector of angle B).



2. Faye wants to lay a path in her garden that is always the same distance from KL and KN.
Using a scale of 1 cm for 10 m, draw the garden and construct a line to show where the path will be laid.



3. Construct the locus of points which are equidistant (the same distance) from M and N.

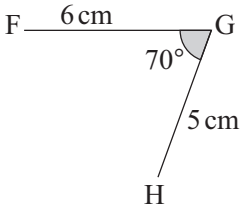


4. Draw A and B 7 cm apart.

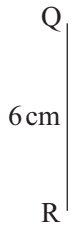
A • •B

A radar at A has a range of 150 km and a radar at B has a range of 90 km. Using a scale of 1 cm for every 30 km, show the area which can be covered by both radars at the same time.

5. Draw one copy of this diagram.
- **a** Construct the perpendicular bisector of FG and the bisector of angle FGH.
- **b** Make with a the point which is equidistant from F and G as well as the same distance from the lines FG and GH.



6. Draw the line QR then draw the locus of all the points P such that angle QPR = 90°.



7. Draw one copy of triangle ABC and show on it:
- **a** the perpendicular bisector of QR.
- **b** the bisector of angle PRQ.
- **c** the locus of points nearer to PR than to QR *and* nearer to R than to Q.