



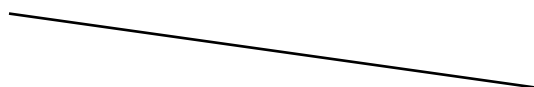
Loci and Construction Exam Practice

Q1. Using a ruler and pair of compasses, construct an equilateral triangle with side length 5 cm. You must show all your construction lines.

Answer: _____
(2 marks)



Q2. Use ruler and compasses to construct a perpendicular line from point Q to the line PR. You must show all your construction lines.



Answer: _____

(2 marks)



Q3. Ted is planning his garden, which has the following features:

- the boundary fence forms an equilateral triangle ABC of side length 12 m.
- at each vertex, a tree is planted, which casts a circular shadow of diameter 6 m.
- a rose-bush which is to be nearer to vertex A than vertex C, and not in the shadow of any tree.

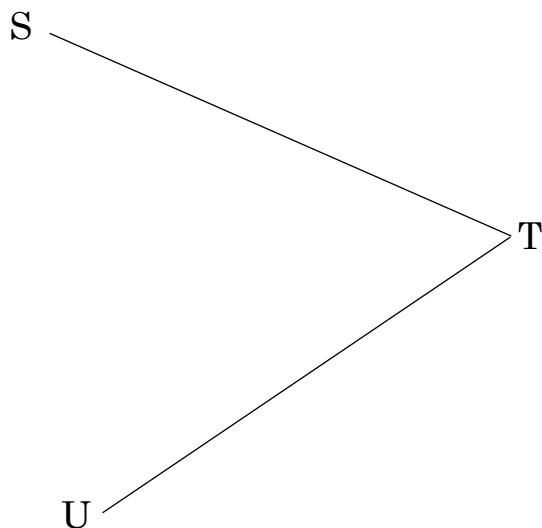
Using ruler and compasses, and a scale of $1\text{cm} = 2\text{m}$, construct a possible scale model of Ted's garden below.

Answer: _____

(4 marks)



Q4. Use ruler and compasses to construct the bisector of angle STU.
You must show all your construction lines.



Answer: _____
(2 marks)