Higher GCSE Revision

## Constructions and loci

## Topics

Standard ruler and compasses constructions - Constructing triangles - Drawing Loci

## Questions

1. Use ruler and compasses to construct an angle of $30^{\circ}$ at $A$.

You must show all construction lines.
2. Use a ruler and compasses to construct the perpendicular to the line segment $A B$ that passes through the point $P$.
You must show all construction lines.

3. The diagram represents a rectangular garden $A B C D$.

The scale of the diagram is 1 cm represents 1 m .
A tree is to be planted in the garden so that it is
nearer to $A$ than to $C$,
within 5 m of point $B$.
On the diagram, shade the region where the tree may be planted.

(Total 3 marks)
4. Triangle $A B C$ has the following properties,

Length $A B=8 \mathrm{~cm}$
Length $B C=5 \mathrm{~cm}$
Angle $A B C=60^{\circ}$
(a) Construct triangle $A B C$.

Triangle $D E F$ has the following properties,
Length $D E=8 \mathrm{~cm}$
Length $E F=5 \mathrm{~cm}$
Angle $F D E=30^{\circ}$
(b) Use diagrams to explain why two different triangles may be constructed using this information

