Questions

Q1.

Here is a map.
The map shows two towns, Burford and Hightown.

Burford
✕

✕
Hightown

Scale: 1 cm represents 10 km
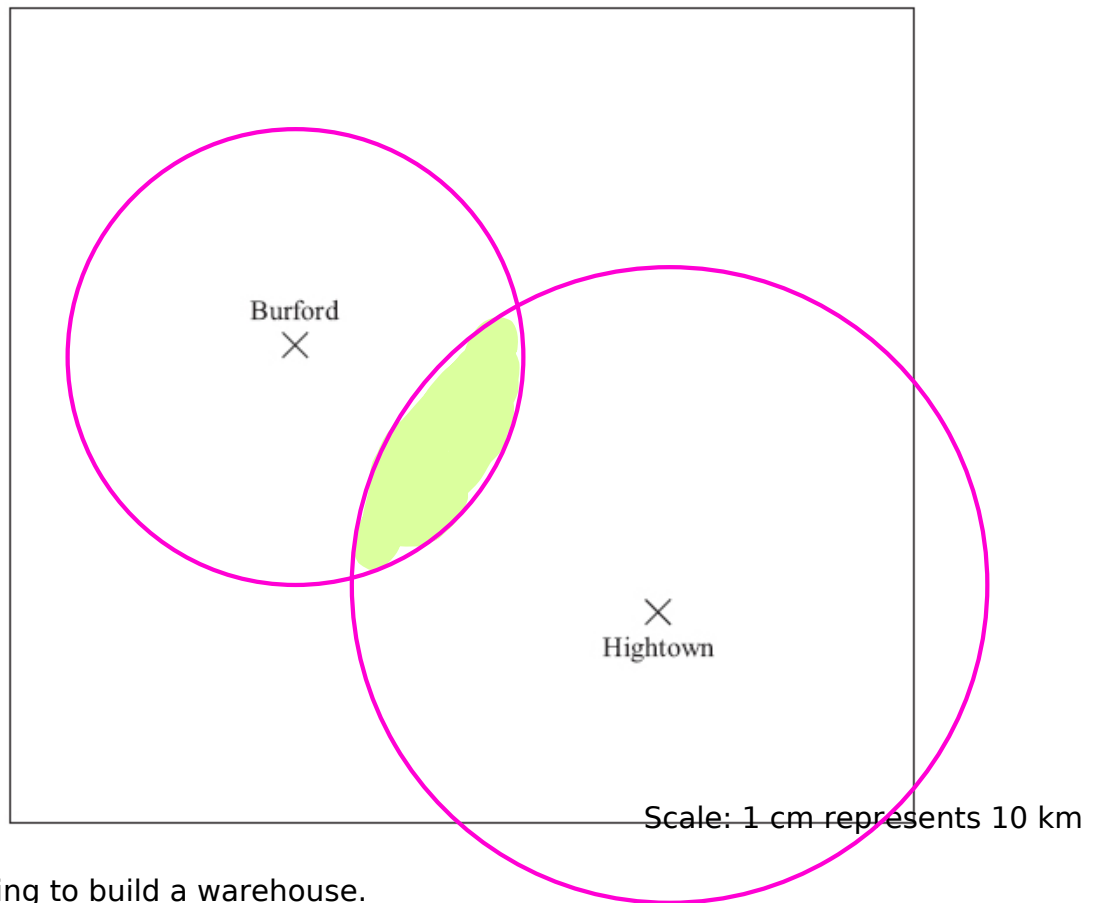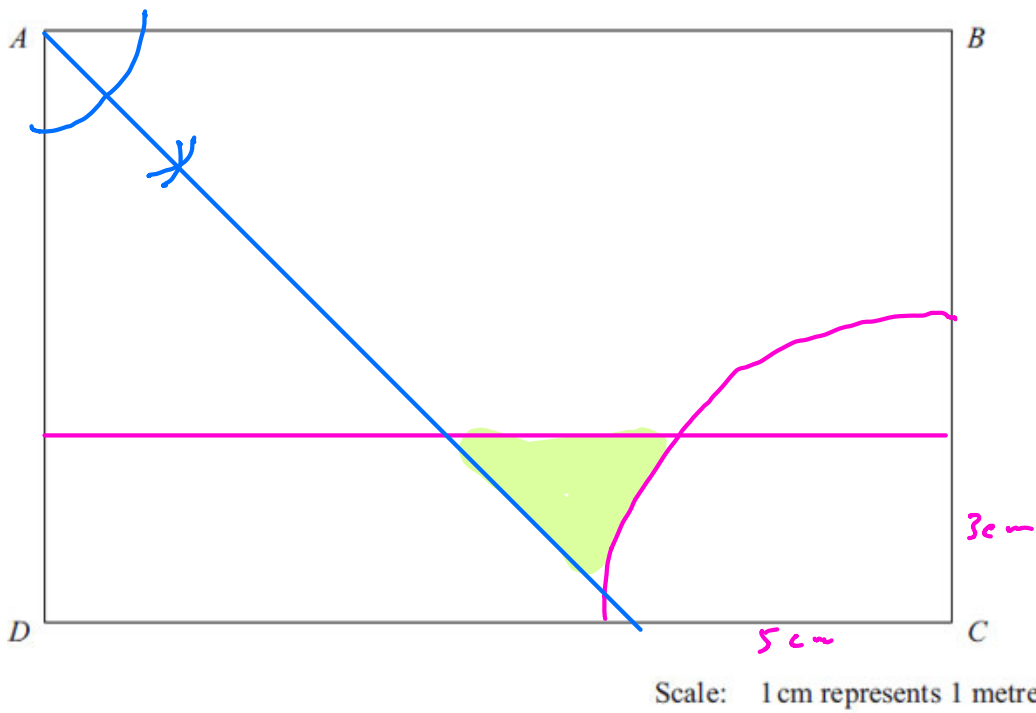
A company is going to build a warehouse.

The warehouse will be less than 30 km from Burford **and** less than 50 km from Hightown.

Shade the region on the map where the company can build the warehouse.

(Total for Question is 3 marks)

Q2.

Here is a scale drawing of a rectangular garden *ABCD*.

Scale: 1 cm represents 1 metre.

Jane wants to plant a tree in the garden

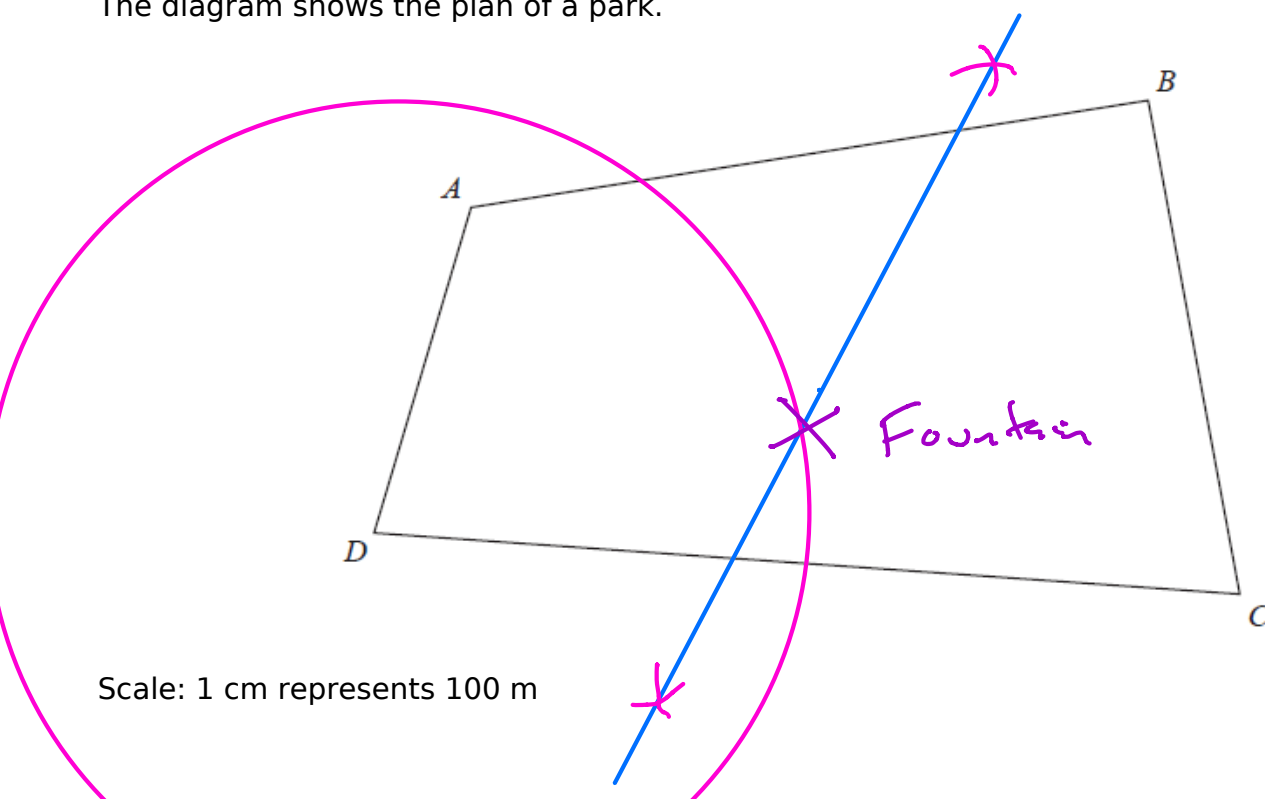   at least 5m from point *C*,
        nearer to *AB* than to *AD*
and less than 3m from *DC*.

On the diagram, shade the region where Jane can plant the tree.

(Total for Question is 4 marks)

Q3.

The diagram shows the plan of a park.
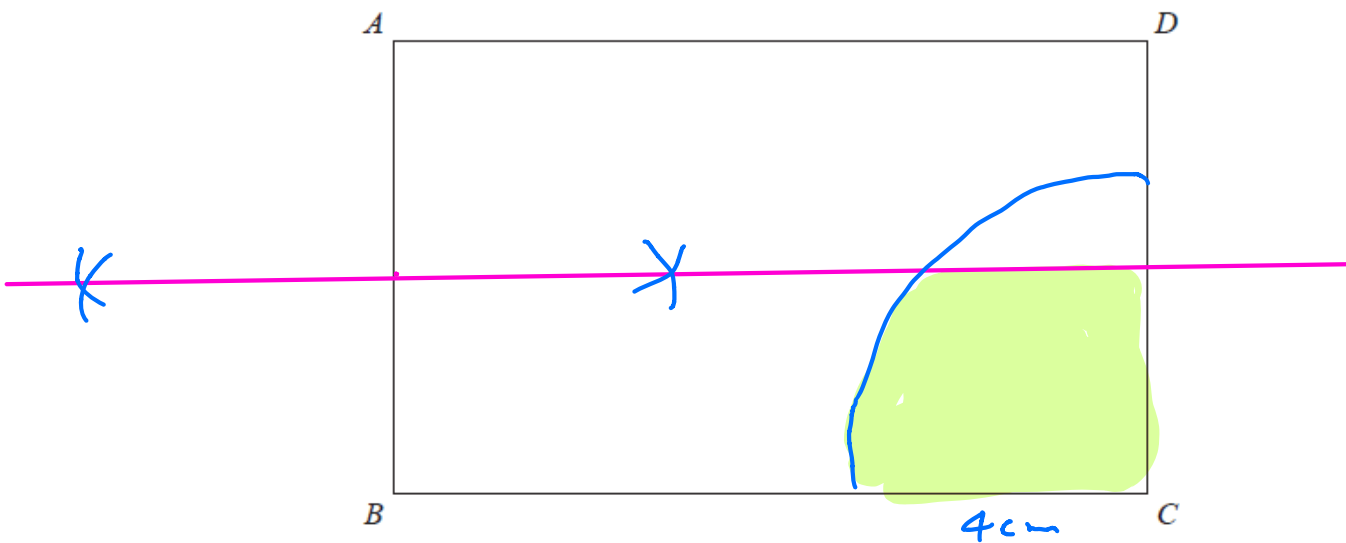

Scale: 1 cm represents 100 m

A fountain in the park is equidistant from *A* and from *C*. The fountain is exactly 700 m from *D*.

On the diagram, mark the position of the fountain with a cross (×).

(Total for question = 3 marks)

Q4.

Here is a scale drawing of an office.
The scale is 1 cm to 2 metres.

A photocopier is going to be put in the office.
The photocopier has to be closer to *B* than it is to *A*.
The photocopier also has to be less than 8 metres from *C*.

Show, by shading, the region where the photocopier can be put.

(Total for question = 3 marks)

Q5.

Here is a map.
The map shows two towns Marlford (*M*) and Newborough (*N*).

A company is going to build a supermarket.
The supermarket will be more than 10 km from Marlford and less than 6 km from Newborough.
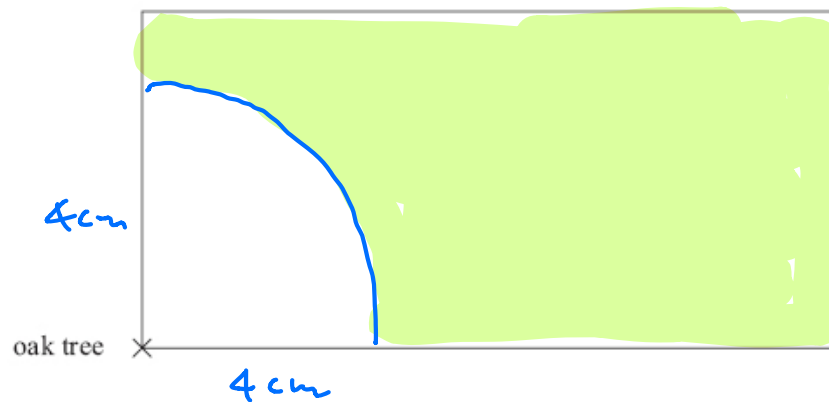
Find and shade the region on the map where the company can build the supermarket.

Scale: 1 cm represents 2 km.
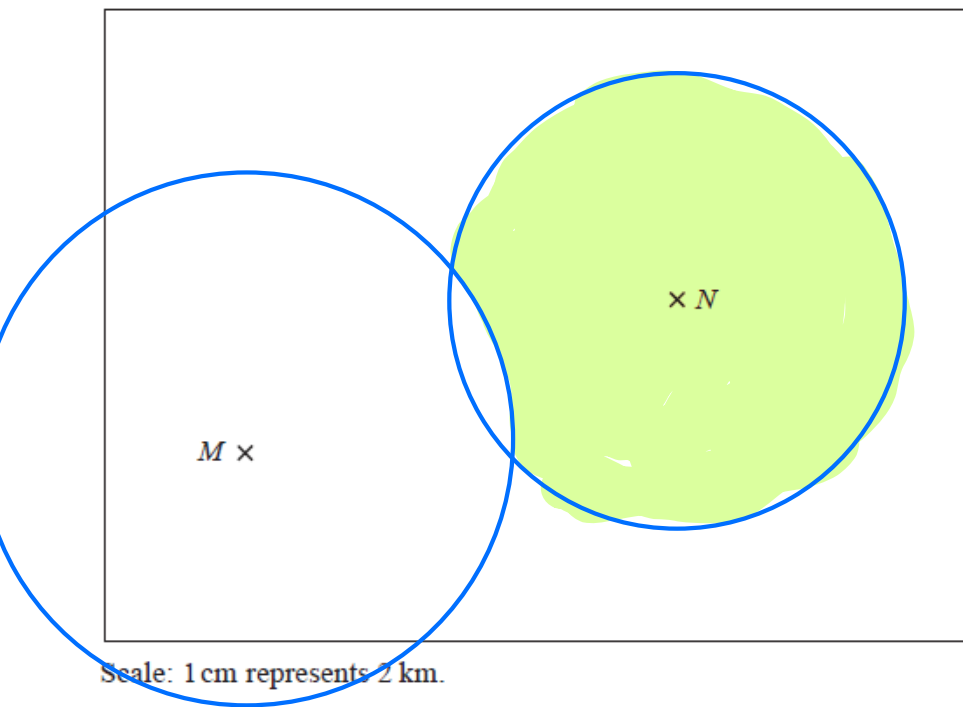
(Total for question = 3 marks)

Q6.

Here is a scale drawing of Gilda's garden.

4cm

oak tree ×

4 cm

Scale: 1 cm represents 1 m

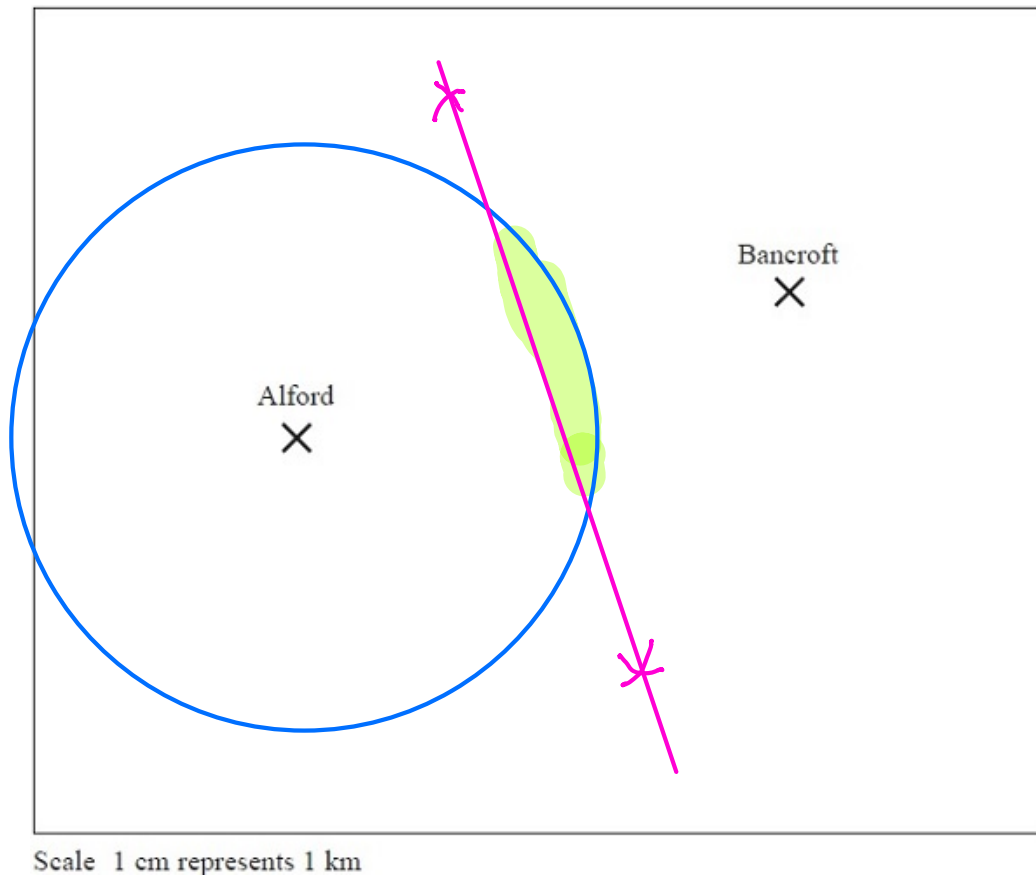Gilda is going to plant an elm tree in the garden.

She must plant the elm tree at least 4 metres from the oak tree.

On the diagram, show by shading the region where Gilda can plant the elm tree.

(Total for Question is 2 marks)

Q7.

The map shows the positions of two schools, Alford and Bancroft.

Scale 1 cm represents 1 km

A new school is going to be built.

The new school will be less than 5 kilometres from Alford.

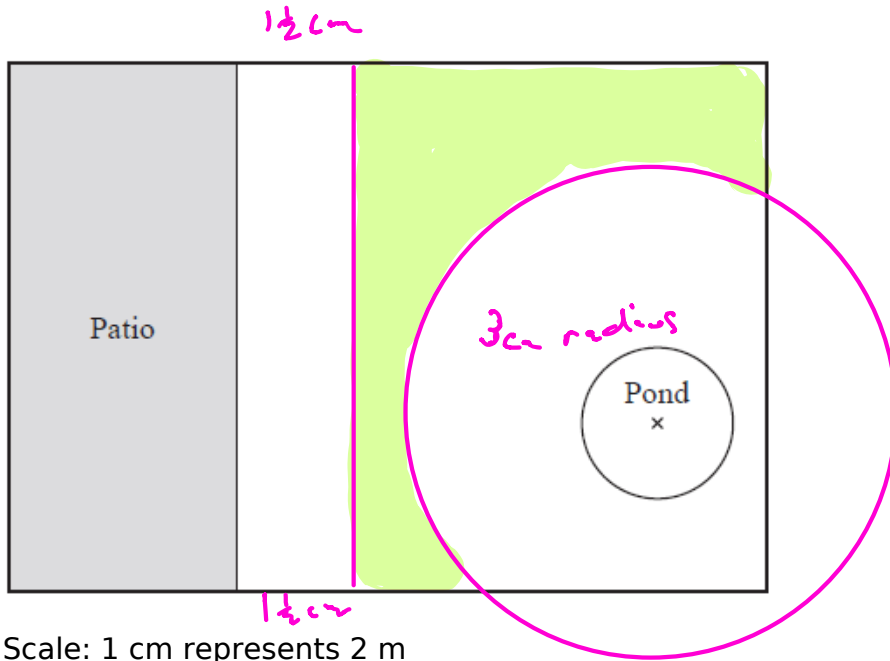It will be nearer to Bancroft than to Alford.

Shade the region on the map where the new school can be built.

(Total for Question is 3 marks)

Q8.

The diagram shows a garden in the shape of a rectangle.

The scale of the diagram is 1 cm represents 2 m.

1½ cm

3cm radius

Patio

Pond
×

1½ cm

Scale: 1 cm represents 2 m

Irfan is going to plant a tree in the garden.
The tree must be

more than 3 metres from the patio

and more than 6 metres from the centre of the pond.

On the diagram, shade the region where Irfan can plant the tree.

(Total for Question is 3 marks)

Q9.

The diagram shows a scale drawing of a garden.

Scale: 1 centimetre represents 2 metres

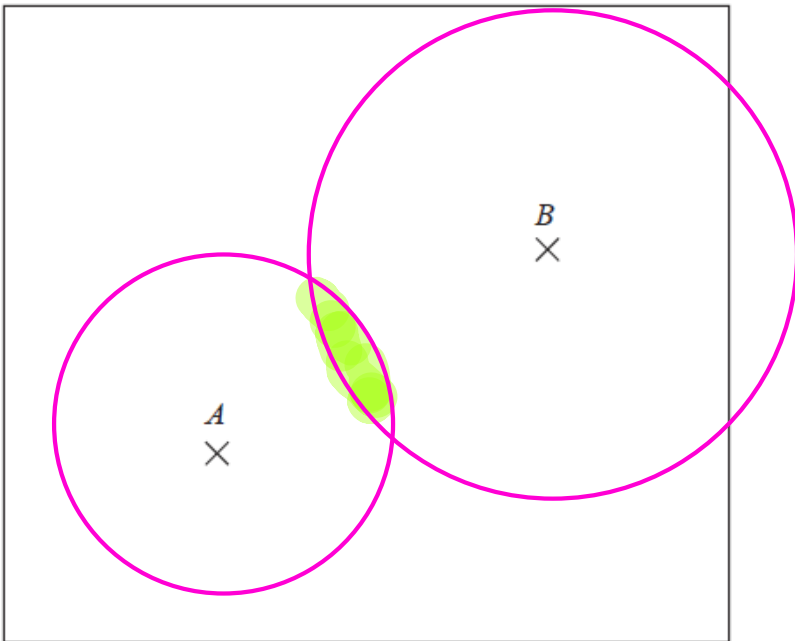Haavi is going to plant a tree in the garden.

The tree must be

less than 7 metres from the fountain,
less than 12 metres from the bench.

On the diagram show, by shading, the region in which Haavi can plant the tree.

(Total for question = 3 marks)

Q10.

The diagram shows the positions of two shops, *A* and *B*, on a map.

The scale of the map is 1 cm represents 5 km.

Yannis wants to build a warehouse.

The warehouse needs to be

less than 10 km from *A*,
less than 20 km from *B*.

Show by shading where Yannis can build the warehouse.

(Total for Question is 3 marks)