Key Concepts
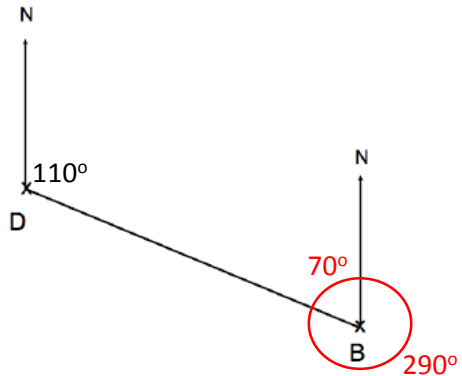
Scales are used to reduce real world dimensions to a useable size.

A **bearing** is an angle, measured **clockwise** from the **north** direction. It is given as a **3 digit** number.

N

070°

P
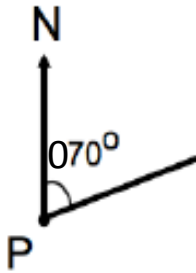
Examples

The diagram shows the position of a boat B and dock D.

N

110°

D

N

70°

B

290°

The scale of the diagram is 1cm to 5km.

a) Calculate the real distance between the boat and the dock.
   $6cm = 6 \times 5$
   $= 30km$

b) State the bearing of the boat from the dock.
   110°

c) Calculate the bearing of the dock from the dock.
   $180^o - 110^o = 70^o$ because the angles are cointerior
   $360^o - 70^o = 290^o$ because angles around a point equal 360°

Find the bearing of A from B
(Diagrams not drawn to scale):

a)
North

North

50° B

A

b)
North

North

105°
A

B
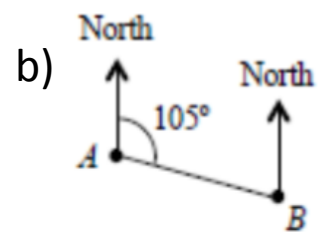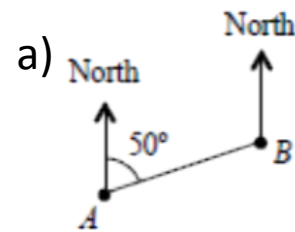
Key Concepts

Line bisector

Angle bisector

A

B

C

Key Words
Bisect
Radius
Region
Shade

Examples
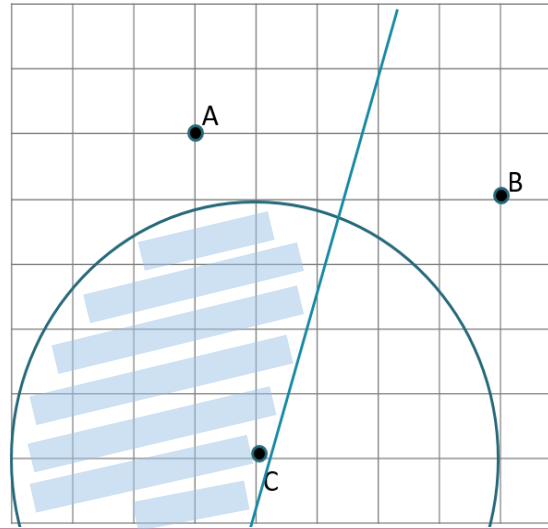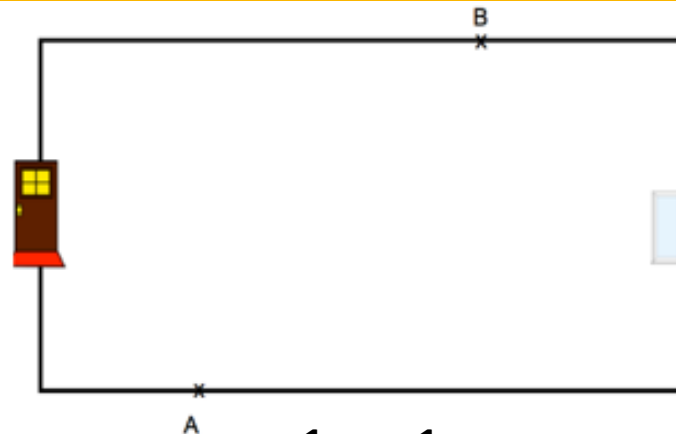
A

B

C
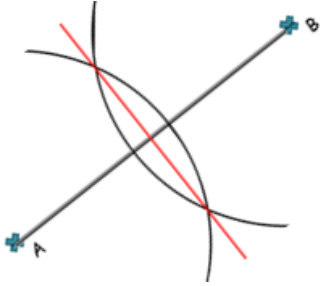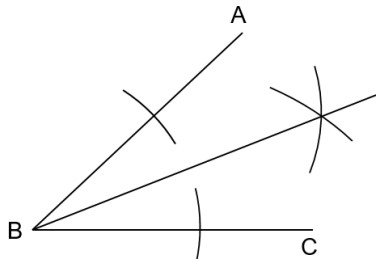
Shade the region that is:
- closer to A than B
- less than 4 cm from C

Line bisector of A and B

Circle with radius 4cm

B

A

1cm = 1m

There are two burglar alarm sensors, one at A and one at B.

The range of each sensor is 4m.

The alarm is switched on.

Is it possible to walk from the front door to the patio door without setting off the alarm?