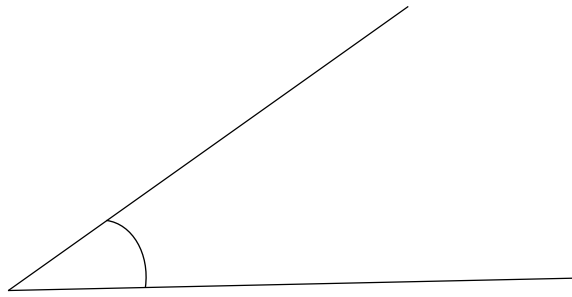


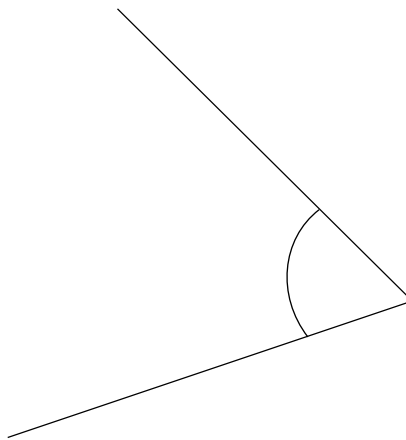
Constructions and Loci

Name.....

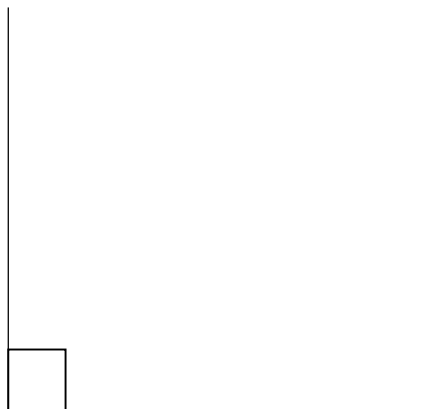
1. Bisect this angle using a compass and a pencil.



2. Bisect this angle using a compass and a pencil.

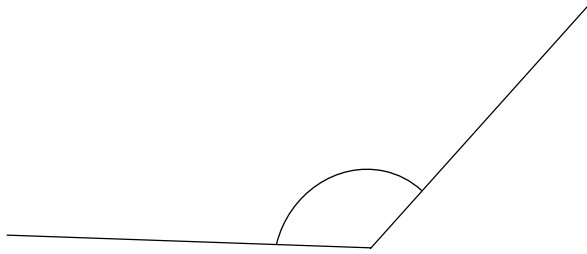


3. Bisect this angle using a compass and a pencil.



Constructions and Loci

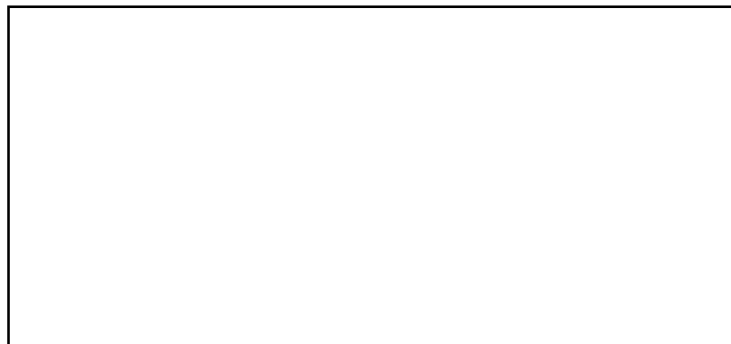
4. Bisect this angle using a compass and a pencil.



5. Below is the plan of Hanks garden.
Hank wants to plant a tree so that it is closer to the back fence than it is to the neighbours fence.

Shade the region where Hank *could* plant his tree.

Hanks house

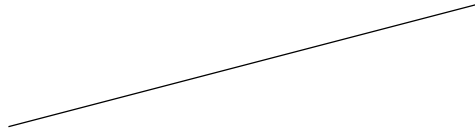


Back fence

Neighbours fence

Constructions and Loci

6. Bisect this line using a compass and a pencil.

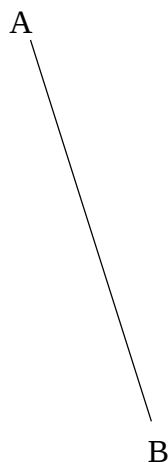


7. Bisect this line using a compass and a pencil.



Constructions and Loci

8. Bisect this line AB using a compass and a pencil.



9. The two villages Frodsham and Kingsley are shown below.
 The local council have decided to build a new swimming pool.
 Both towns would like the swimming pool in their town.
 To make things fair, the pool will be built equidistant from both villages.

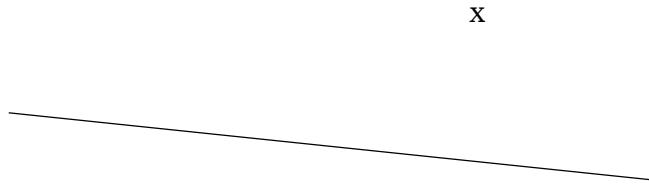
Show all the possible places where the swimming pool could be built.

F

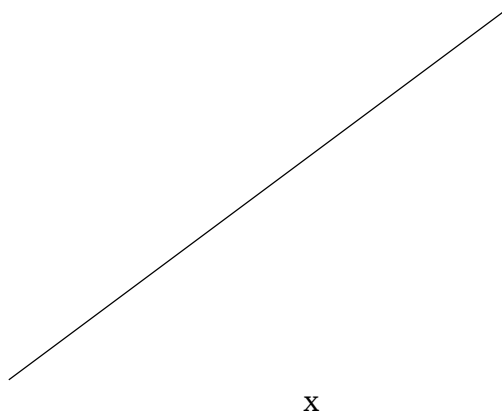
K

Constructions and Loci

10. Create a perpendicular bisector from the cross through the line.



11. Create a perpendicular bisector from the cross through the line.

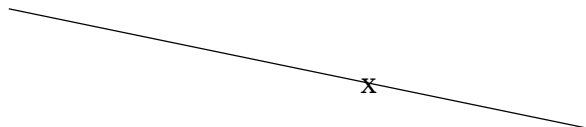


Constructions and Loci

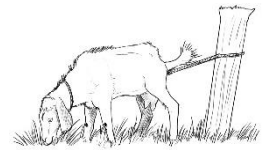
12. Create a perpendicular bisector from the cross through the line.



13. Create a perpendicular bisector from the cross through the line.



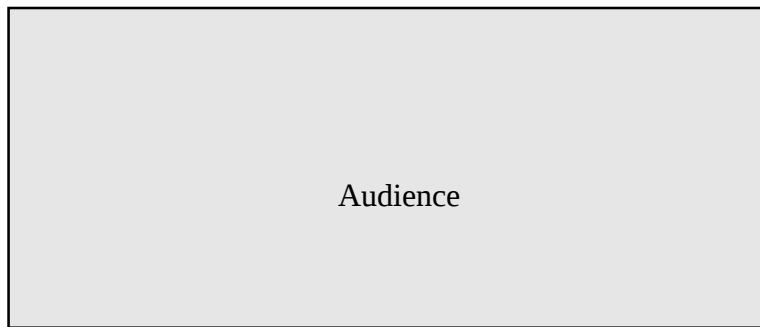
Constructions and Loci



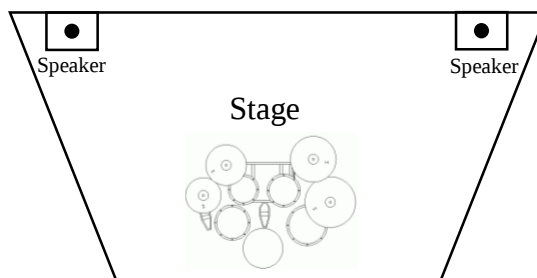
14. A goat has been tethered in a field.
The piece of rope is 3 metres long.
1 cm = 1 metre
Show in the space below where the goat is capable of standing.
The pole is drawn for you from a birds eye view.



15. At a concert, if you stand within 2 metres of the speaker you may potentially damage your hearing.
1cm = 1 metre
On the diagram show where you should not stand.



Protective railing



Constructions and Loci

16. A council is deciding where to build a new fire station.

It has to be within 2 miles of each town.

Show where the fire station could be built.

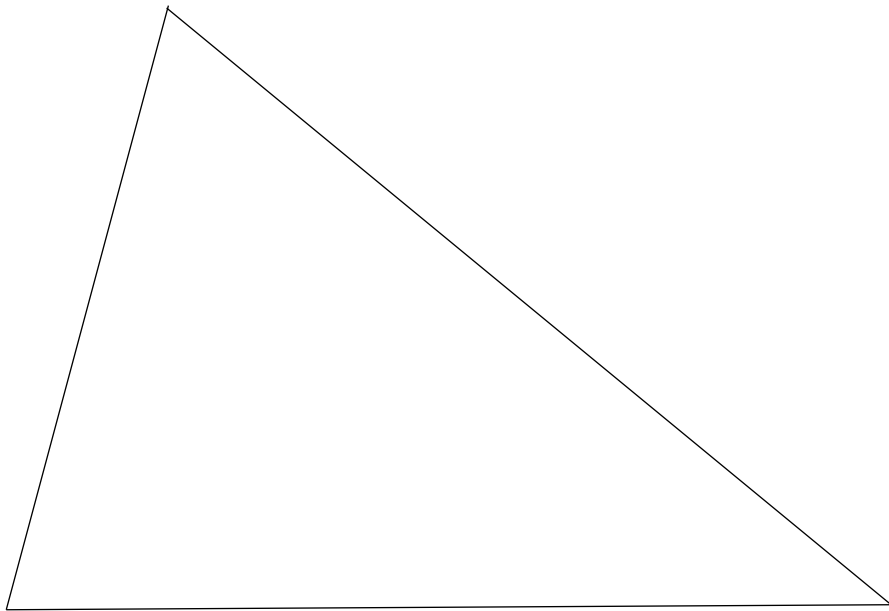
1cm = 0.5 miles

Thurstaston •

• Barnston

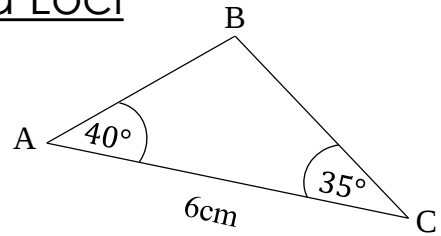
•
Heswall

17. Using a compass and a ruler, locate the centroid of this triangle.



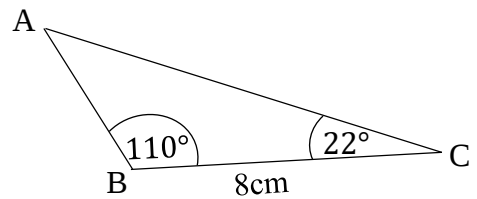
Constructions and Loci

18. a) In the space below, draw this sketch accurately.



b) Measure the length AB to the nearest mm.

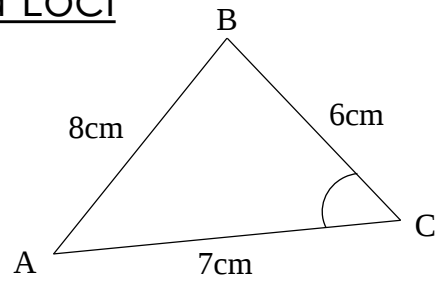
19. a) In the space below, draw this sketch accurately.



b) Measure the length AC to the nearest mm.

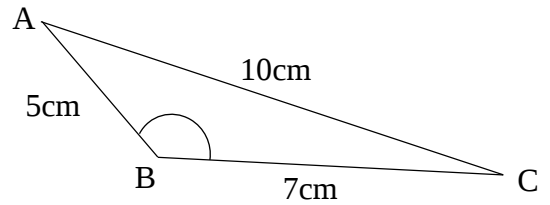
Constructions and Loci

20. a) In the space below, draw this sketch accurately.



b) Measure the angle ACB .

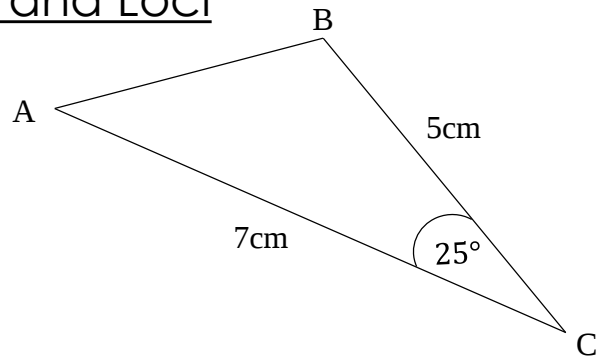
21. a) In the space below, draw this sketch accurately.



b) Measure the angle ABC .

Constructions and Loci

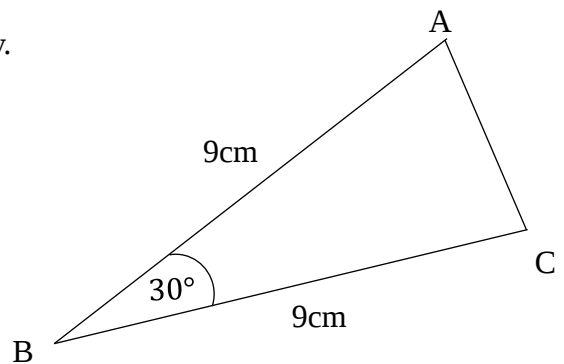
22. a) In the space below, draw this sketch accurately.



b) Measure the length AB .

c) Measure the angle CAB

23. a) In the space below, draw this sketch accurately.



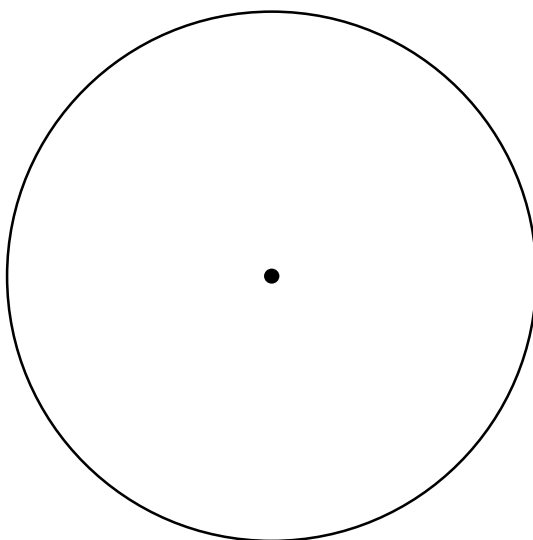
b) Measure the length AC .

c) Measure the angle BCA

Constructions and Loci

24. In the space below, draw an accurate 6cm equilateral triangle..

25. In the circle below, construct a regular hexagon so that all six corners are on the circumference.



Constructions and Loci

26. Below shows the plan view of Zoe's garden.
She has been told there is a time capsule buried somewhere in her garden.

There is a 2m path along the back of the house which it not underneath.

She has been told that it is:

- Within 3m of the tree centre
- Closer to fence BC than it is AB

Shade the region where the time capsule could be buried.

