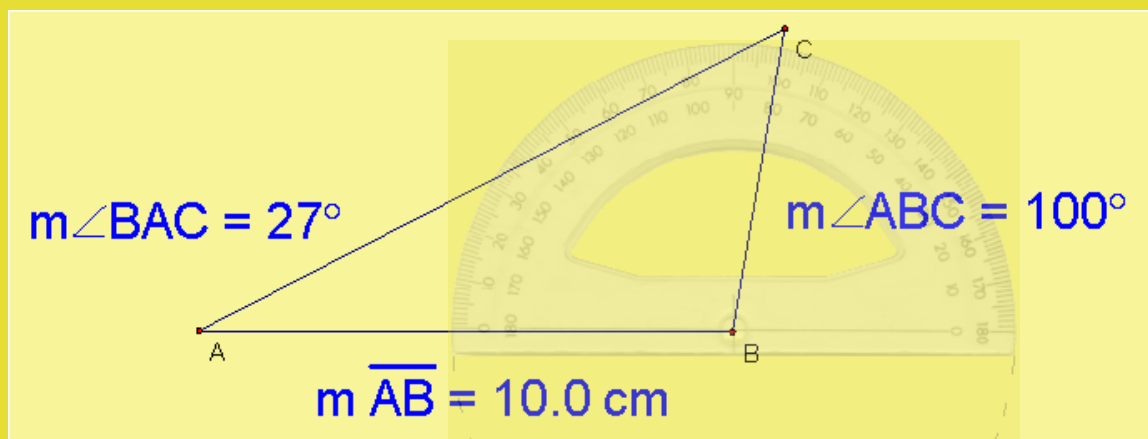


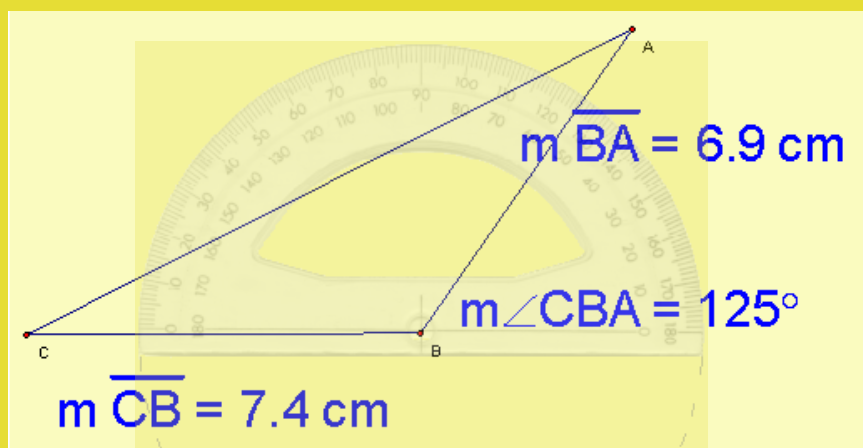
## Constructing triangles

You will need: a protractor, compasses, a ruler and pencil.

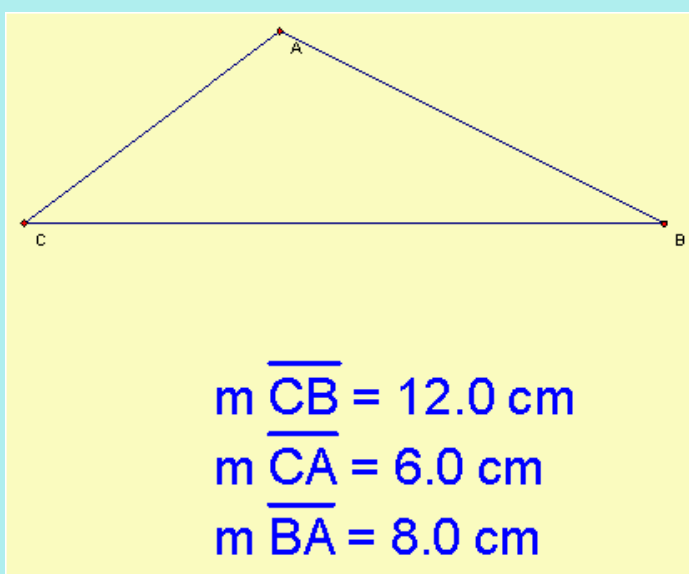
### 1. One side and 2 angles



## 2. 2 sides and an angle



### 3. 3 sides



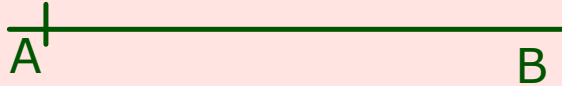
## Constructing an equilateral triangle

Draw a base line.

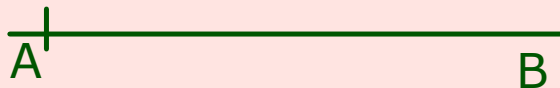


Set your compasses to 10cm.

Mark A on the left of your base line and B 10cm away.



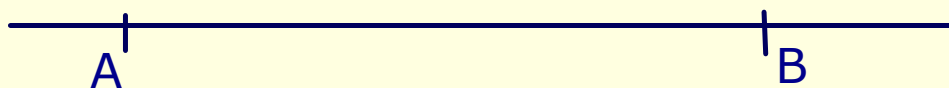
From A draw an arc and from B draw an arc.



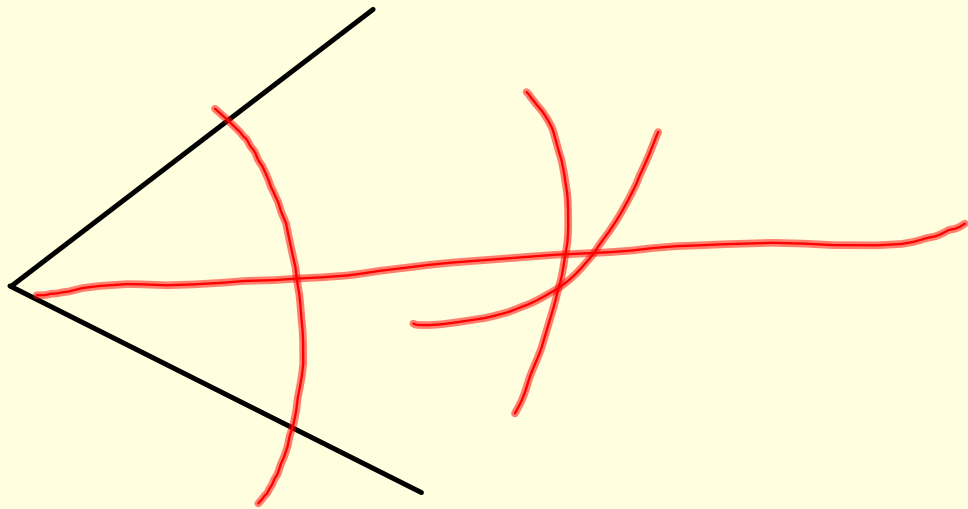
C is your 3rd point of the triangle!

Make an equilateral triangle with sides 8cm.

Constructing the perpendicular bisector of a line.



Bisecting an angle

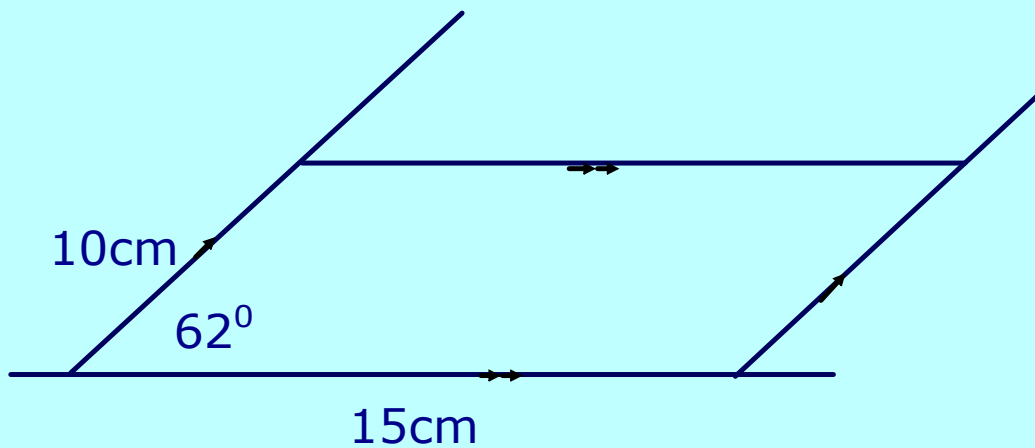


Construct a  $45^{\circ}$  angle.

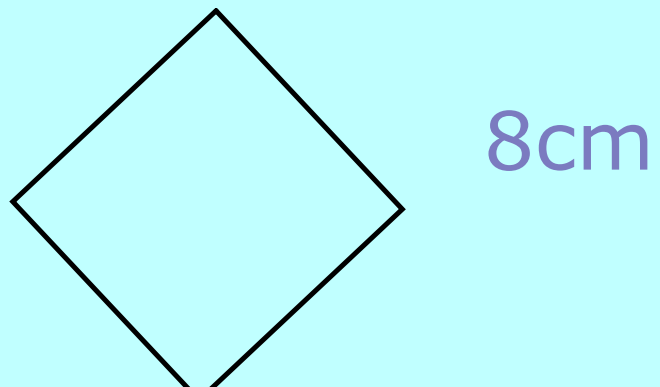
Construct a  $30^{\circ}$  angle.

## Construct this parallelogram

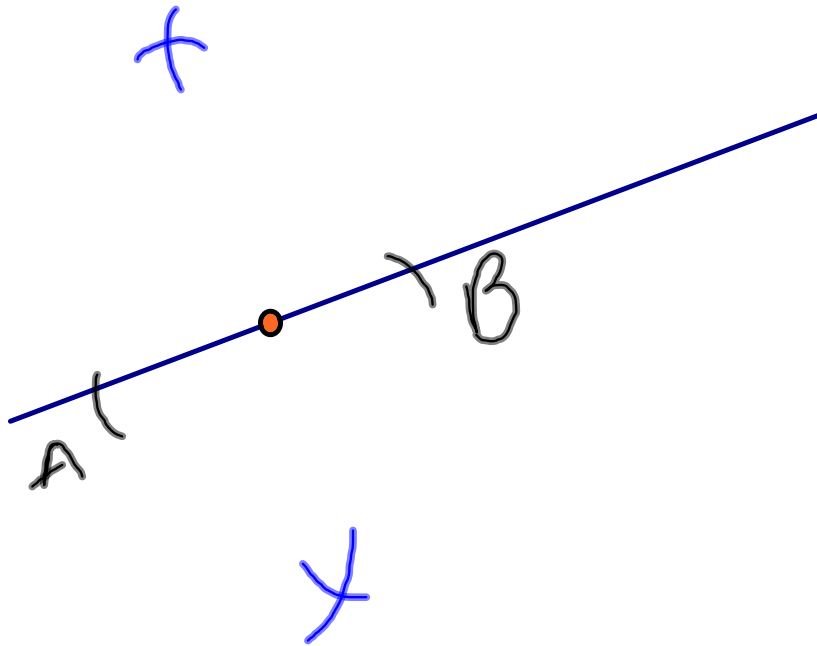
(you will need a protractor)



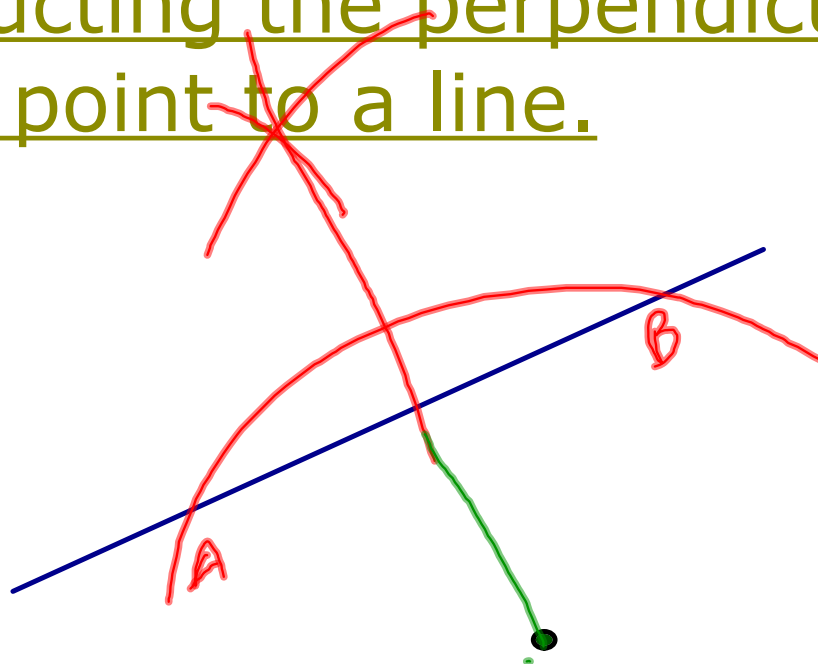
Construct a square with sides 8cm.



## Constructing the perpendicular from a point on a line.



## Constructing the perpendicular from a point to a line.



On a plain piece of paper construct:

- an equilateral triangle with sides 6cm
- a rectangle 6cm by 5cm
- a right angled, isosceles triangle
- an angle of  $135^{\circ}$
- an angle of  $120^{\circ}$

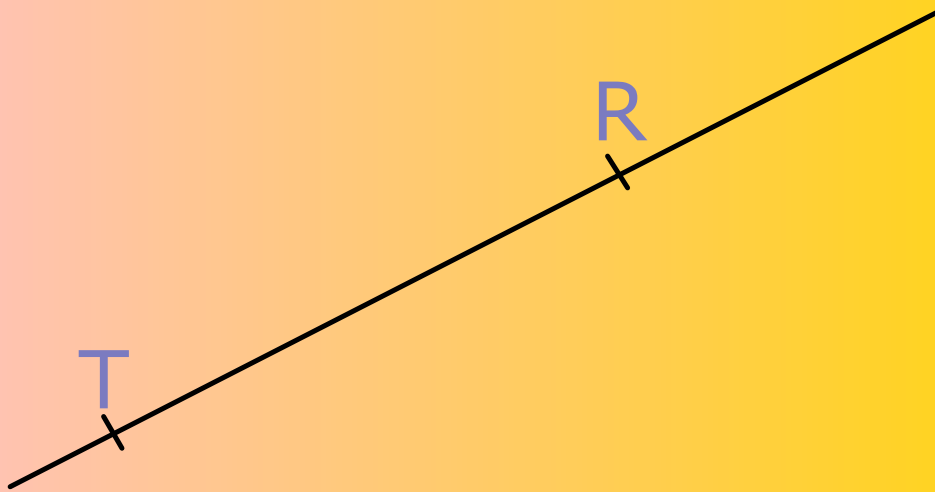
**Make sure each  
construction has a title!**

**In your books:  
page 144 A6 onwards**

see mymaths

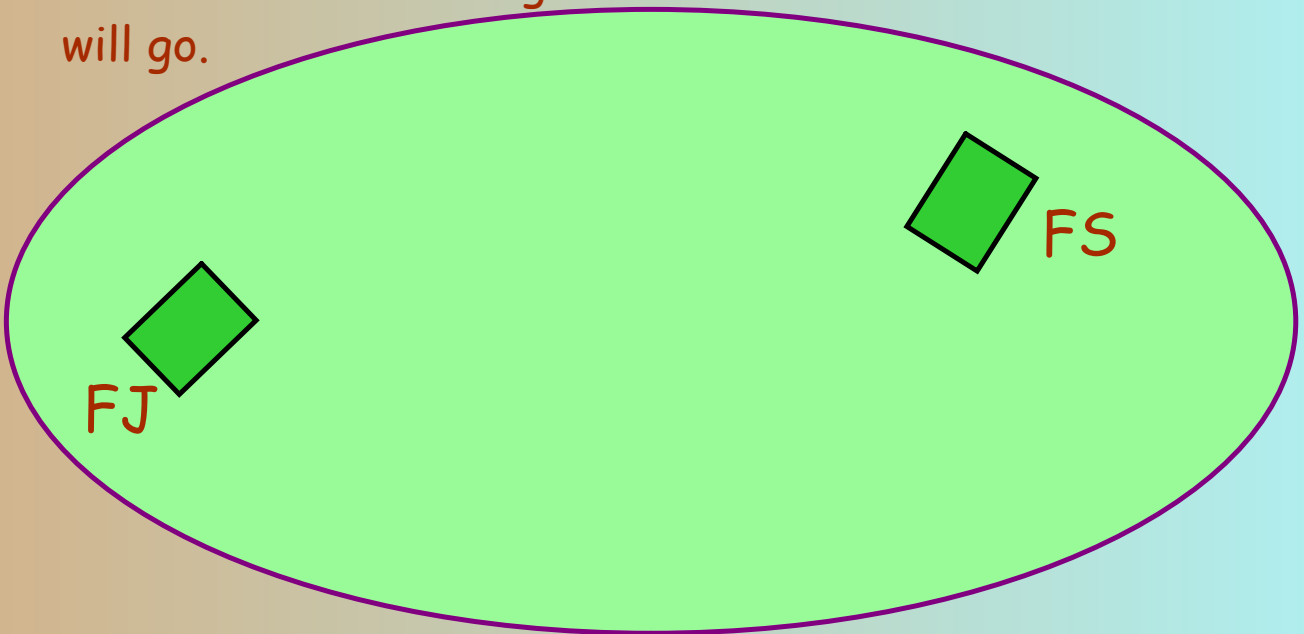
## Loci

Tristan and Rob are standing 15m apart. They are both swinging a ball on a rope. The ropes are 8m long. Draw an accurate diagram (with 1cm representing 1 m) to show the area in which the 2 balls could collide.

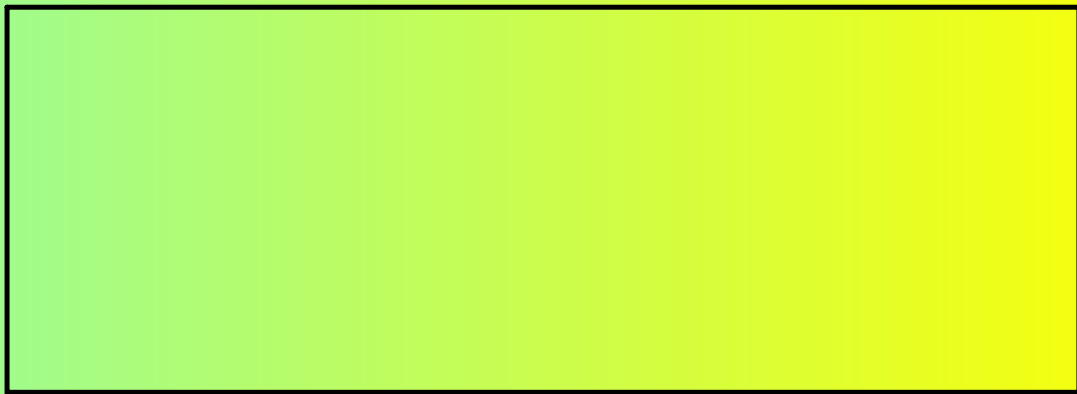


Farmer Smith and Farmer Jones live 2km apart. They haven't spoken to each other for 2 years because Farmer Smith's dog ate Farmer Jones' prize duck. They decide to put a line of tall poplar trees between their farm houses so they don't have to look at each other's land. The trees are located equidistant from both farms.

Draw an accurate diagram to show where the trees will go.



Flo



Joe

Segregation is back.  
Girls must stand closer to Flo than Joe.  
Boys must stand closer to Joe than Flo.  
Shade the area in which the girls can stand.

12m

12m

12m

3 cats wait patiently at the vertices of the triangle for a mouse to arrive.

They can each pounce 5m, except the fat one who can only pounce 4. Shade the safe area for the mouse.

page 146 B1-B6

## Nets of shapes

Draw the net of a cube.

Mark one corner with a cross.

Put 2 more crosses where you think faces will meet your cross.

Check.

## Attachments

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C. Plans and elevations.ppt