

NAME : \_\_\_\_\_

CLASS : \_\_\_\_\_

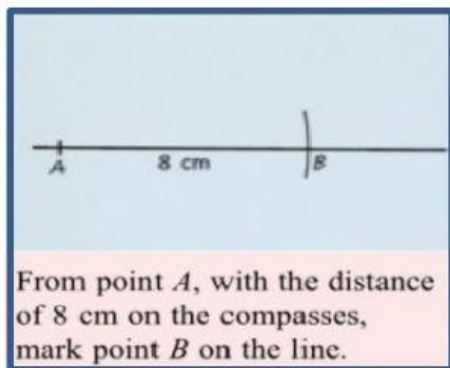
## HOW DO YOU PERFORM A GEOMETRICAL CONSTRUCTION

### (i) Line segments

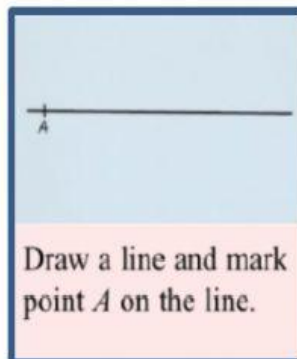
A section of a straight line with a fixed length is known as a **line segment**.

Construct the line segment  $AB$  with a length of 8 cm using only a pair of compasses and a ruler.

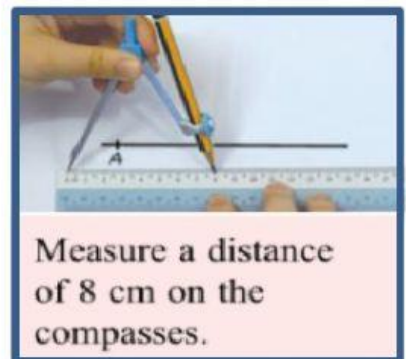
**Solution**



From point  $A$ , with the distance of 8 cm on the compasses, mark point  $B$  on the line.



Draw a line and mark point  $A$  on the line.



Measure a distance of 8 cm on the compasses.

Arrange the pictures below in the correct order.



**(ii) Perpendicular bisectors**

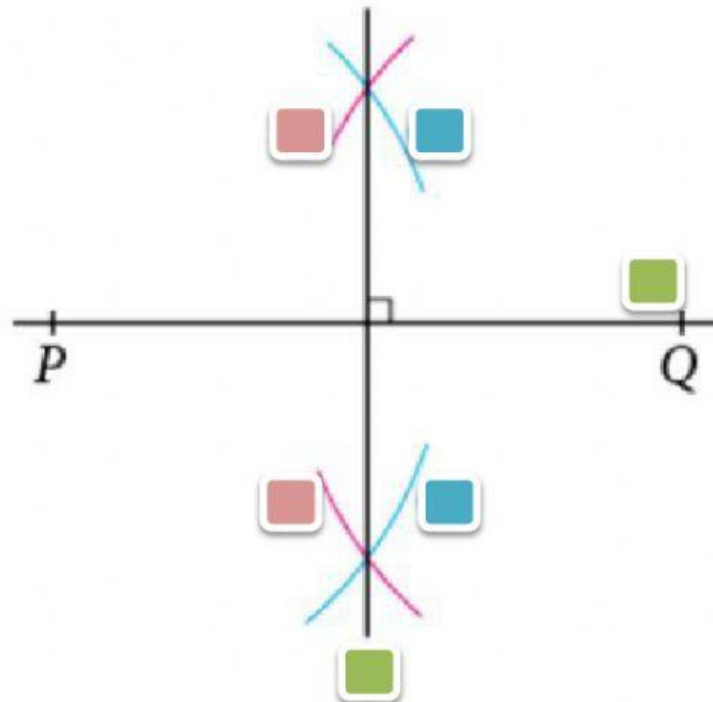
If line  $AB$  is perpendicular to line segment  $CD$  and divide  $CD$  into two parts of equal length, then line  $AB$  is known as the **perpendicular bisector** of  $CD$ .

Construct the perpendicular bisector of line segment  $PQ$  using only a pair of compasses and a ruler.



**Solution**

Arrange the pictures below in the correct order.



### (iii) Perpendicular line to a straight line

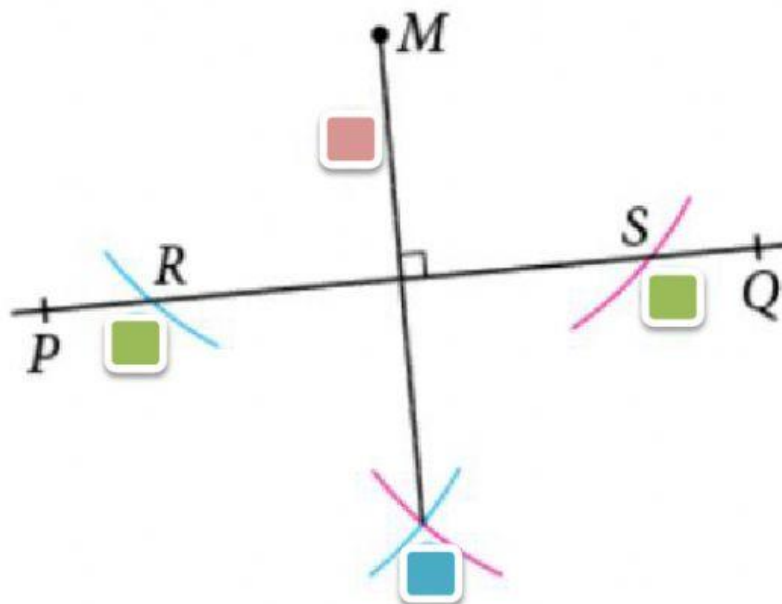
Using only a pair of compasses and a ruler, construct the perpendicular line from point  $M$  to the straight line  $PQ$ .

•  $M$



*Solution*

Arrange the pictures below in the correct order.



Thank you for  
**your hard work**  
and **dedication!**