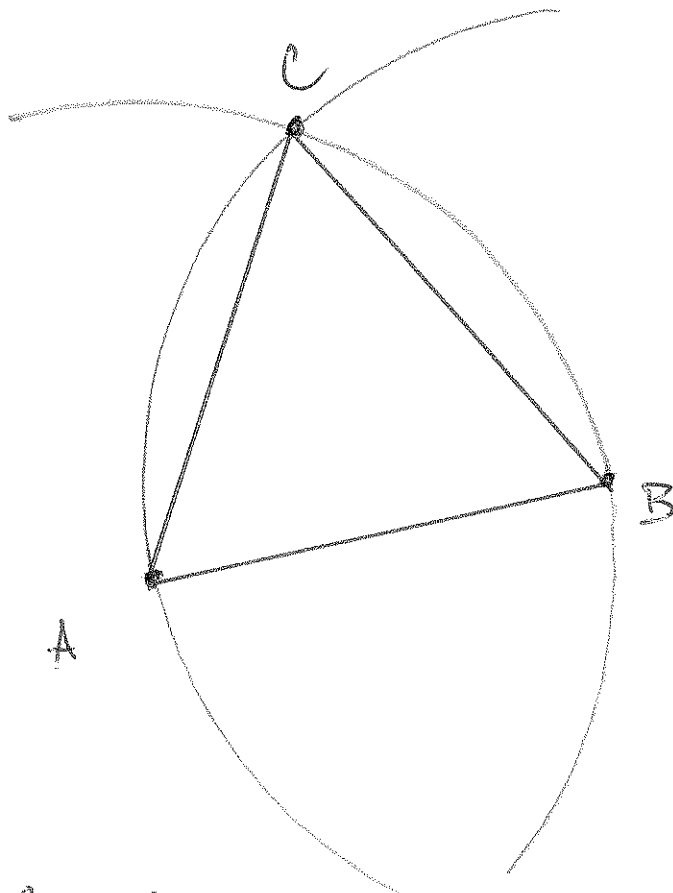


# Construction 1 Equilateral

$\Delta$  given a side.

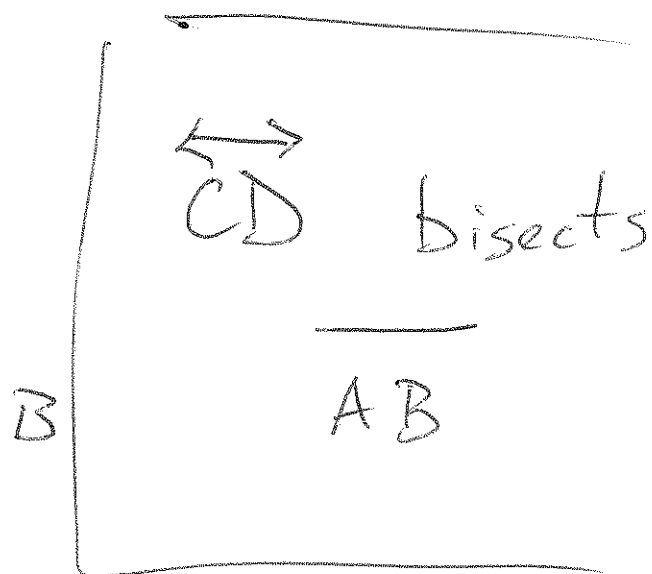
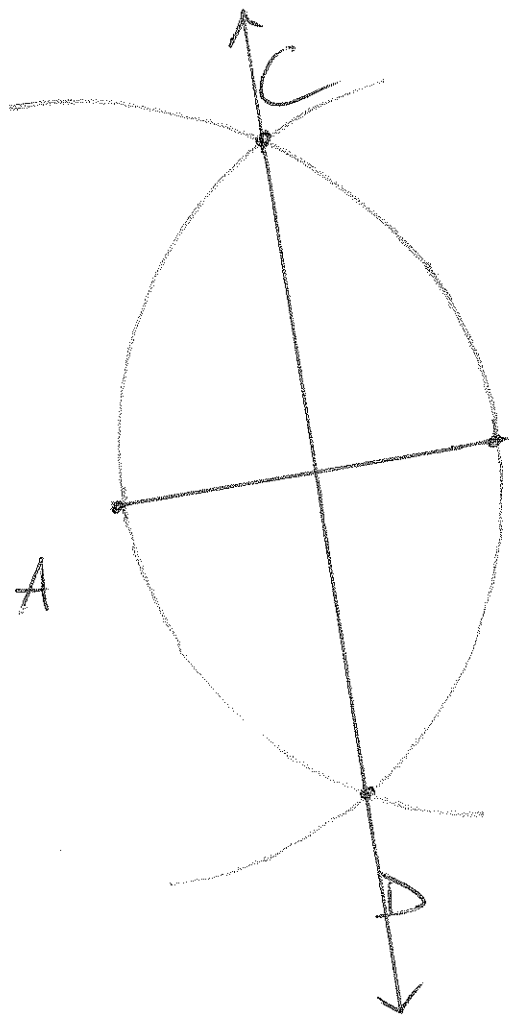


$\Delta ABC$  is  
equilateral.

- 1) Circle, center A, radius AB
- 2) Circle, center B, radius AB
- 3) Mark intersection C

# Construction 2

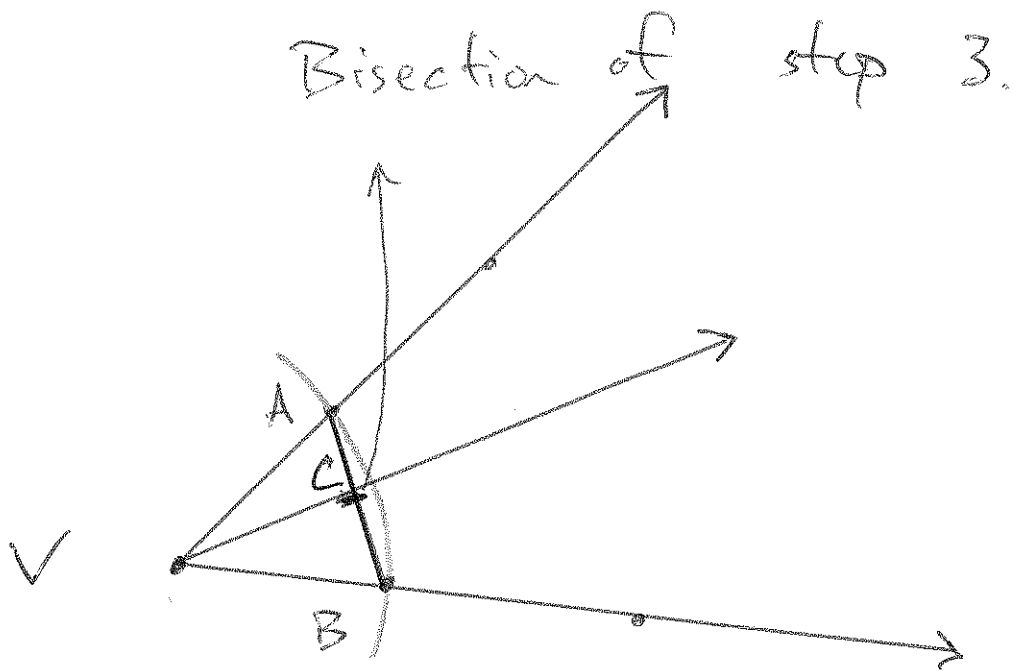
Bisect  $\overline{AB}$ .



Why? Symmetry  
over line  $\overleftrightarrow{CD}$ .

- 1) Circle, center A radius AB
- 2) Circle, center B radius AB
- 3) Mark intersection points.

# Construction 3      Bisect angle.



Angles  $\angle AVC$  and  $\angle CVB$  are congruent

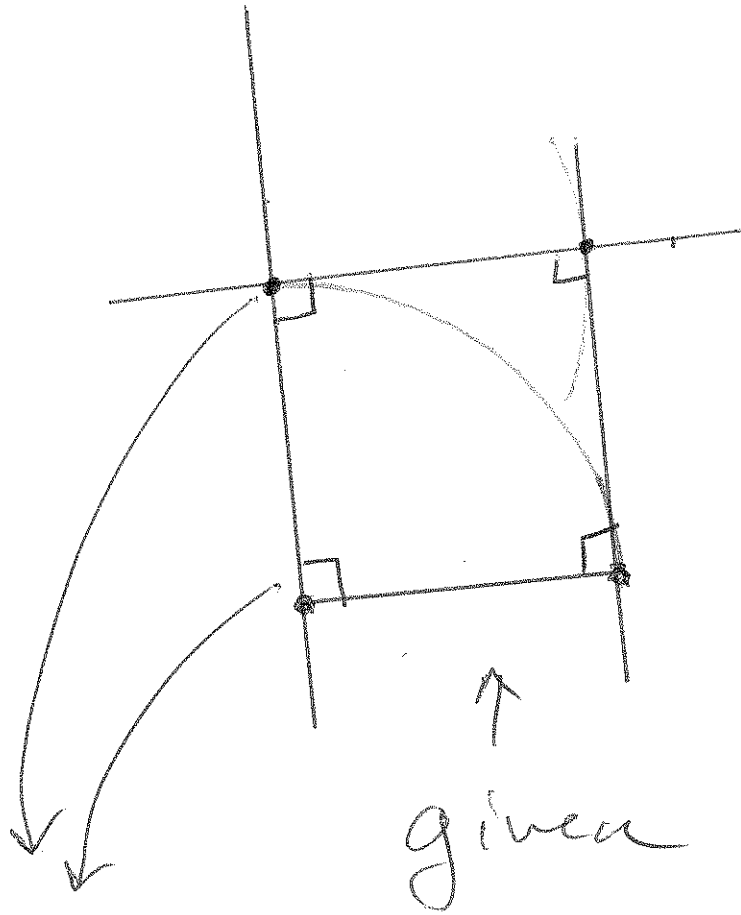
Step 1 Draw a circle  
with center  $V$

Step 2 Make segment from  
inter-section points.

Step 3 Bisect the segment.

Step 4 Draw line  $V$   $C$  and  $C$   $D$

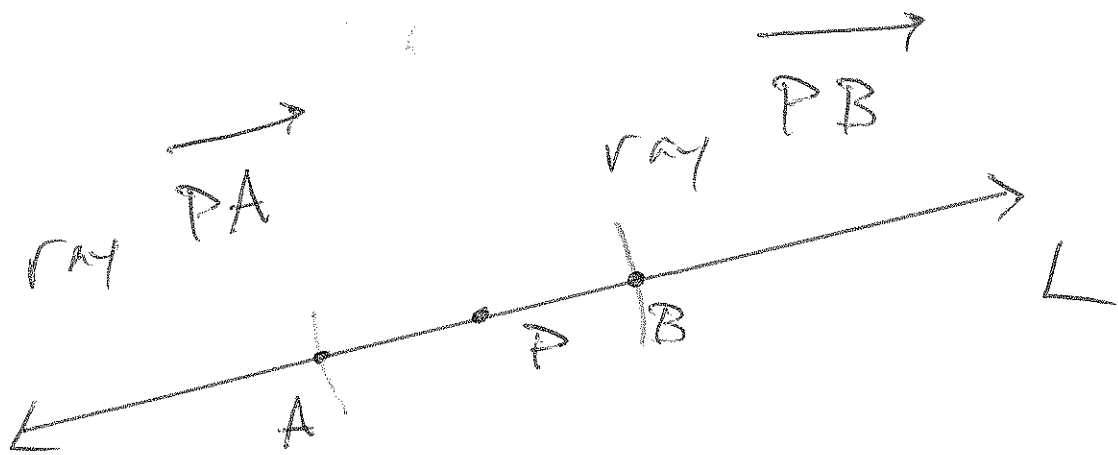
Square



Angle found by bisecting  
straight angle.

Construction 4 Given line  $L$

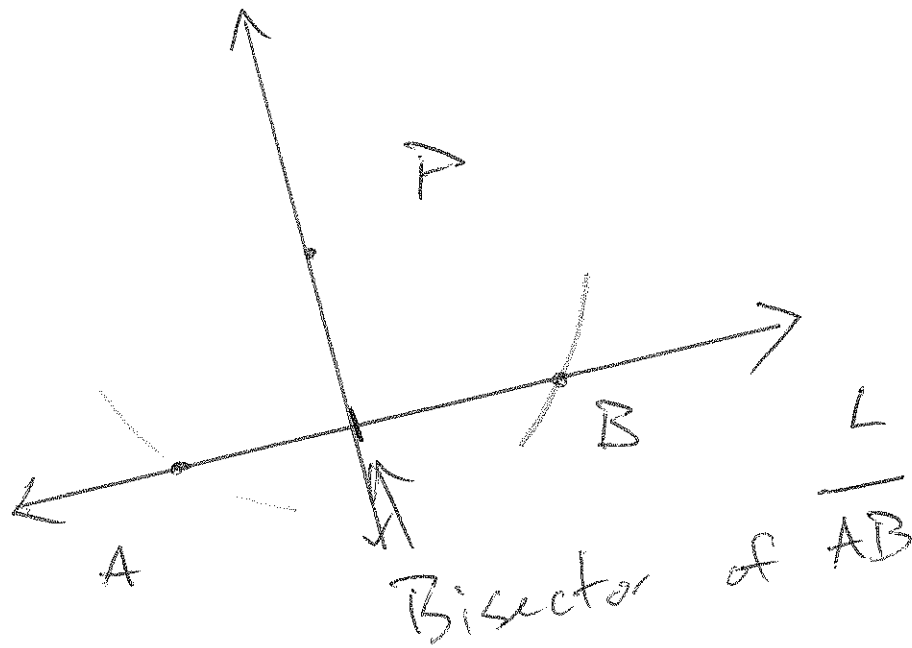
and  $P$  on  $L$ , find a line  
 $\perp$  to  $L$  through  $P$ .



Bisect the angle at  $P$ .

Construction 5 Given  $L$

and  $P$  not on  $L$ , find  
line  $\perp$  to  $L$  through  $P$ .



1. Draw circle with center  $P$ .
2. Mark intersection points
3. Bisect  $\overline{AB}$ . (Const. 2)
4. Line through  $P$  and intersection pt.