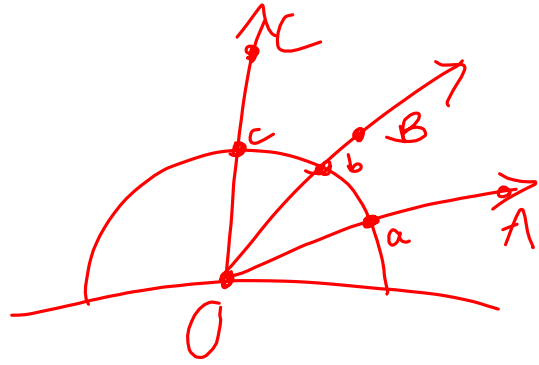


lengths of $OA < OB < OC$

$a < b < c$

or

$a > b > c$



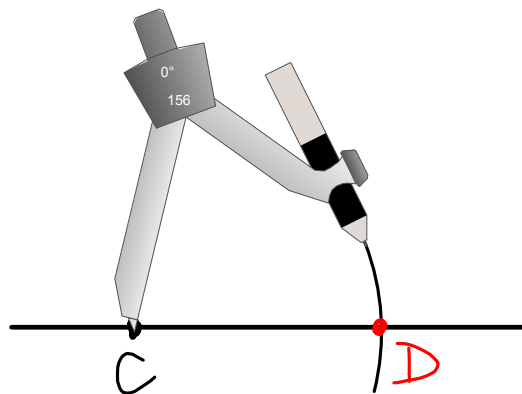
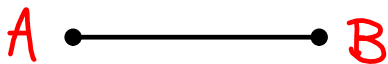
4.7 – Constructions

Construction 1: Bisect a line segment. ✓

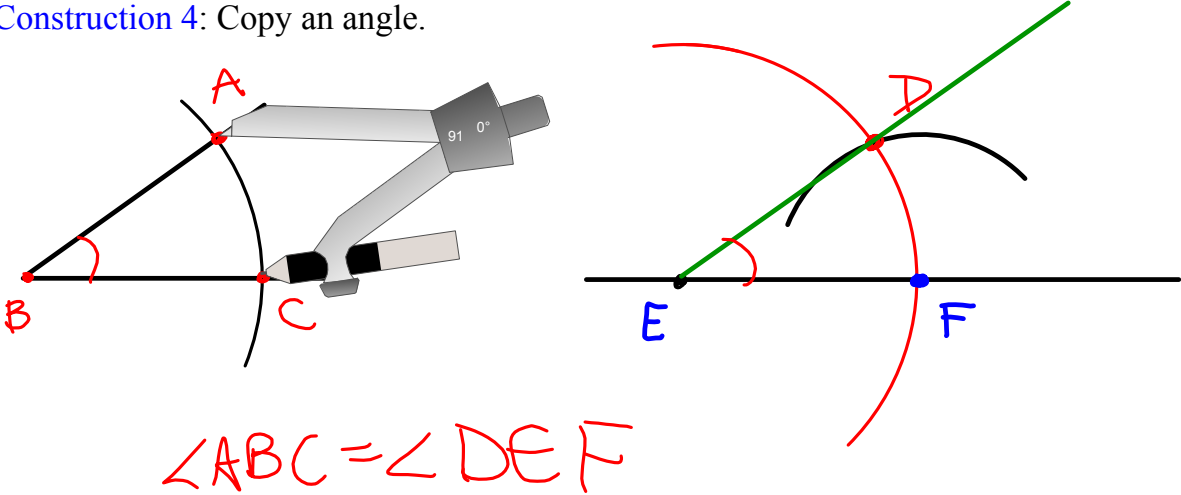
Construction 2: Bisect an angle. ✓

Construction 3: Copy a line segment.

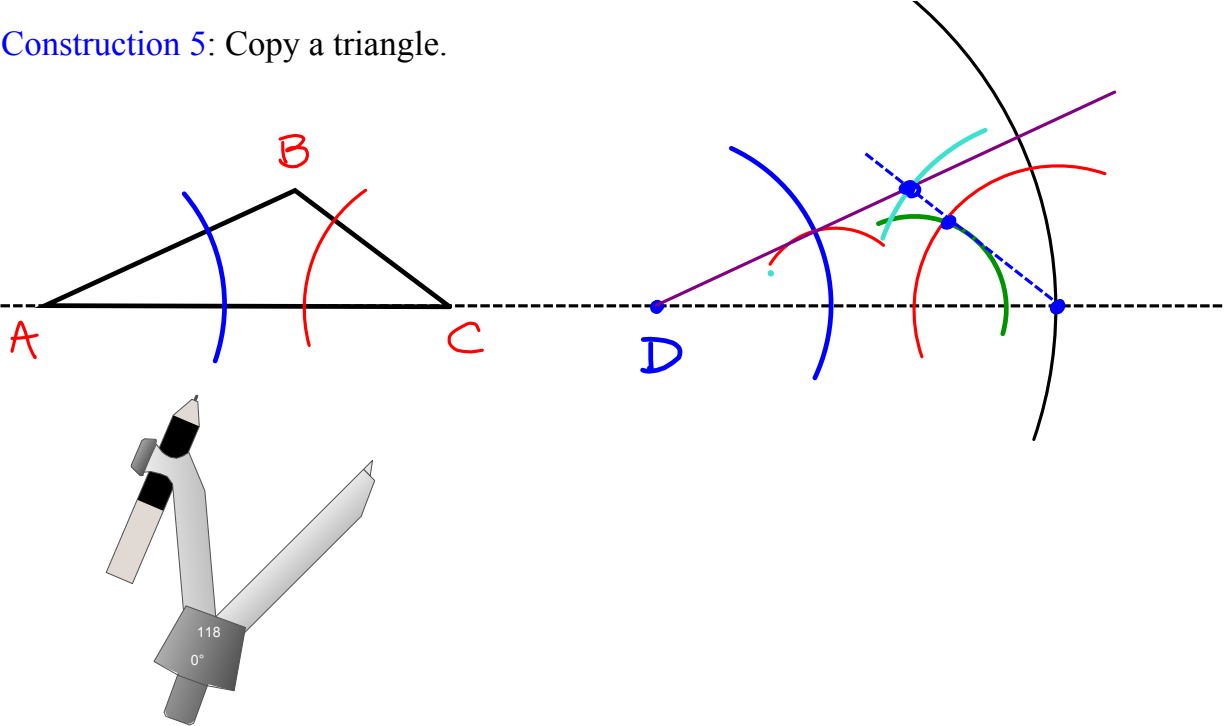
$CD = AB$



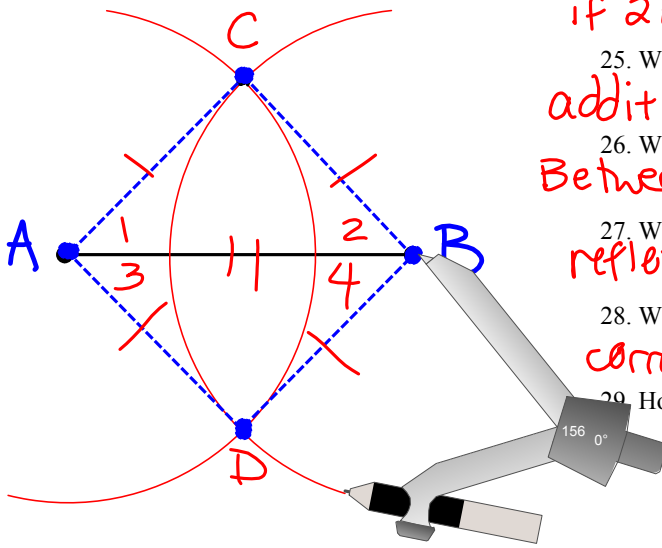
Construction 4: Copy an angle.



Construction 5: Copy a triangle.



22. Draw line segment AB and construct two triangles ACB and ADB so that $AC=CB=AD=DB$. Identify the equal lengths with tick marks.



23. What kind of triangles are $\triangle ACB$ and $\triangle ADB$?

isosceles

24. Why is $\angle 1 = \angle 2$ and $\angle 3 = \angle 4$?

if 2 sides of a \triangle are $=$, the \angle 's opposite them are $=$

25. Why is $\angle 1 + \angle 3 = \angle 2 + \angle 4$?

addition & substitution

26. Why is $\angle CAD = \angle CBD$?

Betweeness of Rays Theorem & substitution

27. Why must $\triangle ACB$ and $\triangle ADB$ be congruent?

reflexivity & SSS

28. Why is $\angle 1 = \angle 3$ and $\angle 2 = \angle 4$?

corresponding parts of $\cong \triangle$'s are $=$

29. How is AB related to $\angle CAD$ and $\angle CBD$?

angle bisector