

Compass Constructions

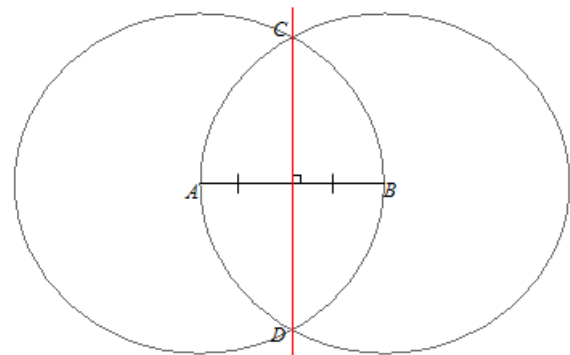
- Always use a straight edge
- Your compass is a tool for measuring distance
- Do not erase marks left by your compass that show the measuring you did

Segment Copy

1. Draw \overline{AB} .
2. Below \overline{AB} draw line ℓ .
3. Put point A' on line ℓ .
4. Set compass to length \overline{AB} .
5. With your compass, copy length \overline{AB} to A' using an arc to show the intersection with line ℓ .
6. Label the intersection with line ℓ as B' .

Bisect a Segment (Perpendicular Bisector)

1. Draw \overline{AB} .
2. Draw circle A, radius AB.
3. Draw circle B, radius BA.
4. Label the intersections of circle A and circle B as C and D.
5. Draw line \overleftrightarrow{CD} .
6. Mark \overline{AB} to show the congruent parts.



Angle Copy

1. Draw a large $\angle B$.
2. Draw ray \overrightarrow{EG} as one side of the angle to be drawn.
3. Draw circle B: center B, any radius.
4. Label the intersection of circle B with the sides of $\angle B$ as points A and C.
5. Draw circle E: center E, radius BA.
6. Label the intersection of circle E with ray \overrightarrow{EG} as point F.
7. Draw circle F: center F, radius AC.
8. Label either intersection of circle E and circle F as point D.
9. Draw ray \overrightarrow{ED} .
10. Use your protractor to measure each angle. Confirm they are congruent.



Bisect an Angle

1. Draw large $\angle R$.
2. Draw circle R: center R, any radius.
3. Label the intersections of circle R with the sides of $\angle R$ as points S and T.
4. Draw circle T: center T, radius TS.
5. Draw circle S: center S, radius ST.
6. Label the intersection of circle S and circle T as P.
7. Draw ray \overrightarrow{RP} .
8. Mark the congruent angles that are created.

Constructions Rubric

Needs Improvement	Satisfactory	Excellent
Few or no construction arcs visible	Some constructions arcs visible	Construction arcs are visible and appropriate
Few or no vertices or relevant intersections are labeled	Most vertices and relevant intersections are labeled	All vertices and relevant intersections are labeled
Lines drawn without straightedge or not drawn correctly	Most lines neatly drawn with straightedge	Lines neatly drawn with straightedge
0-2 constructions are correct	3 of 4 constructions are correct	All constructions are correct