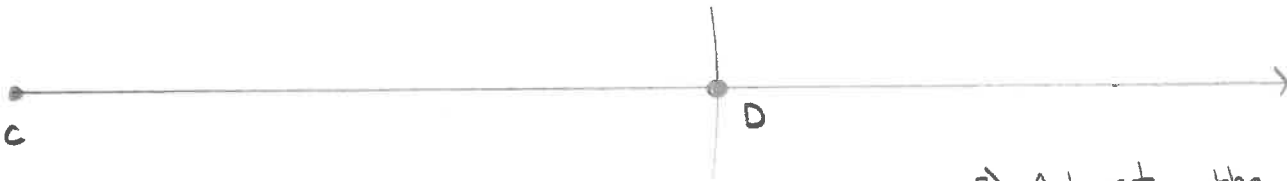


1) constructing a congruent segment

Steps

1) Construct w/ ruler a segment \overline{AB}

2) Construct w/ ruler a ray



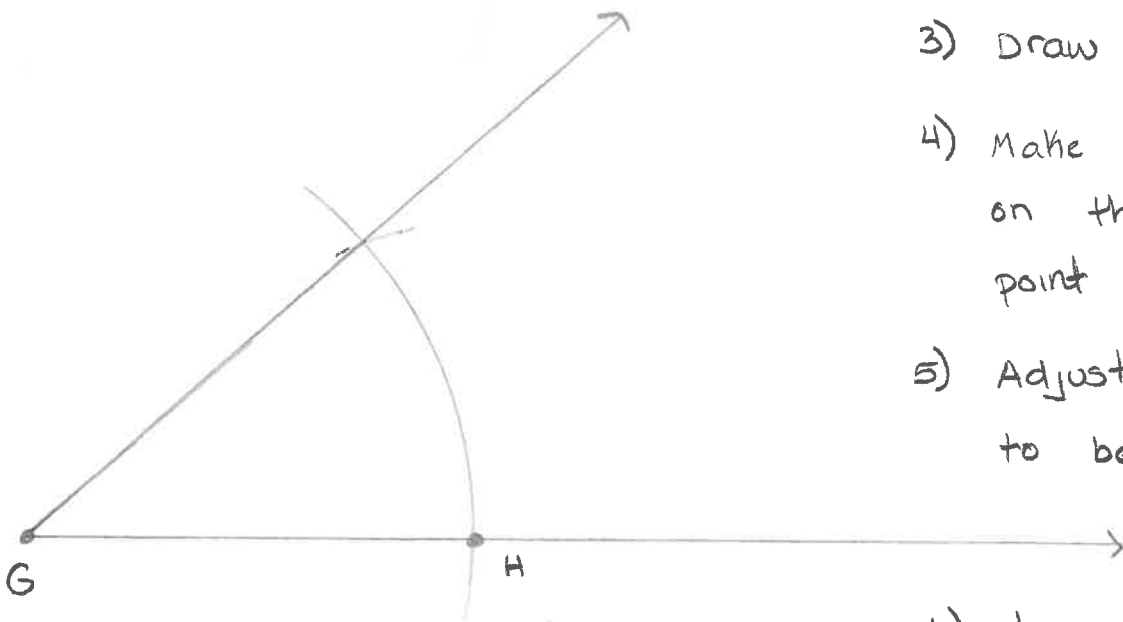
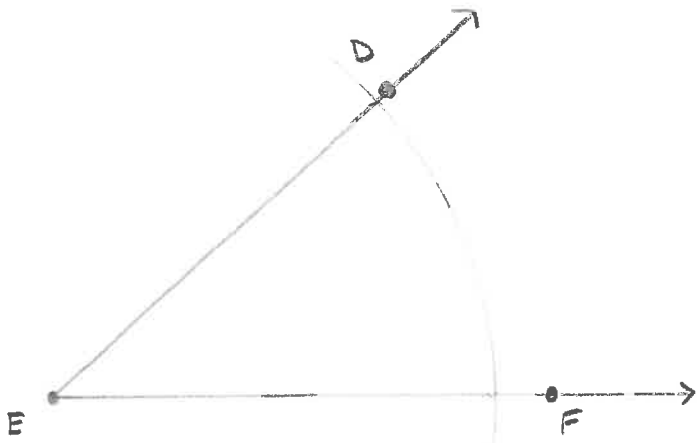
$$\overline{AB} \cong \overline{CD}$$

3) Adjust the compass so the point is on A and the pencil is on B

4) place the point on C and draw an arc w/ the compass on the ray.

5) label the point D

2) Constructing a congruent angle

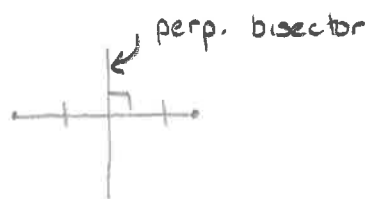


Steps

- 1) With a ruler construct the angle
- 2) With compass point on E make an arc intersecting both sides
- 3) Draw a ray
- 4) Make an identical arc on the ray w/ the point on G
- 5) Adjust the compass to be the length of the original arc
- 6) place point on H and mark this length on the 2nd arc
- 7) Draw a ray from G to the intersection point of the 2 arcs

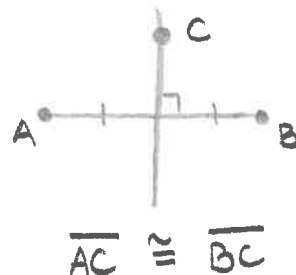
3) Constructing a perpendicular bisector

Need to know



Perpendicular Bisector Conjecture

If a point is on the perpendicular bisector, then it is equidistant from the endpoints.

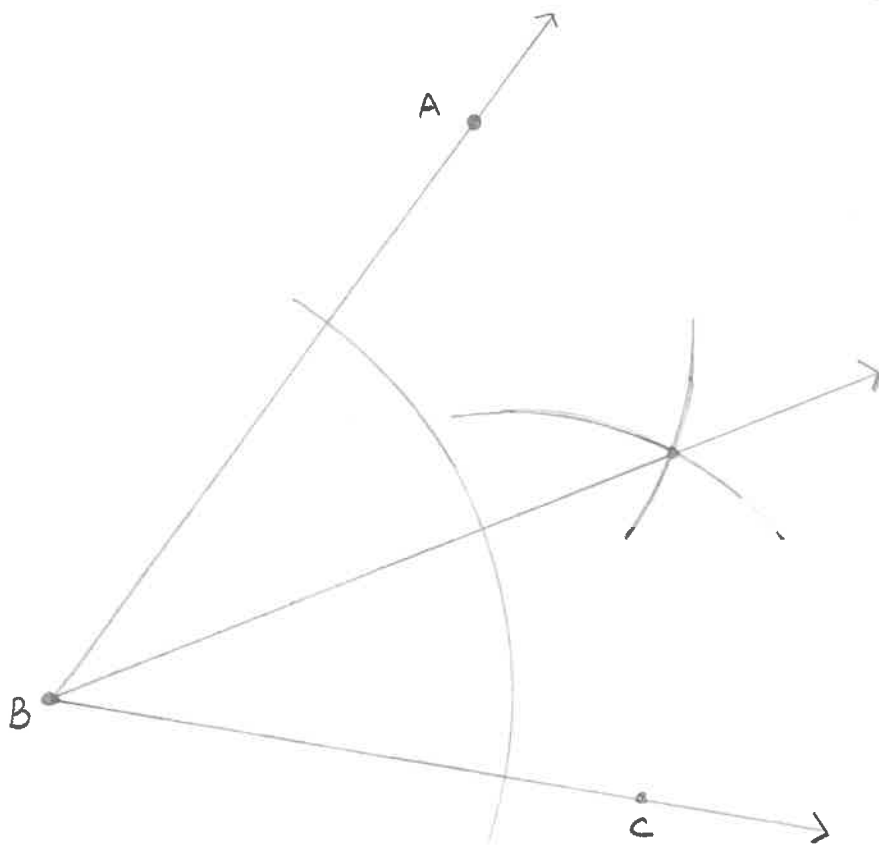


Steps

- 1) Draw a line segment
- 2) set your compass more than half the distance between the endpoints
- 3) Use one endpoint as center and swing an arc on one side of the segment
- 4) using the same compass setting do the same on the other endpoint intersecting the first arc
- 5) the point where the 2 arcs intersect is equidistant from the endpoints
- 6) repeat process creating many equidistant points thus constructing perpendicular bisector



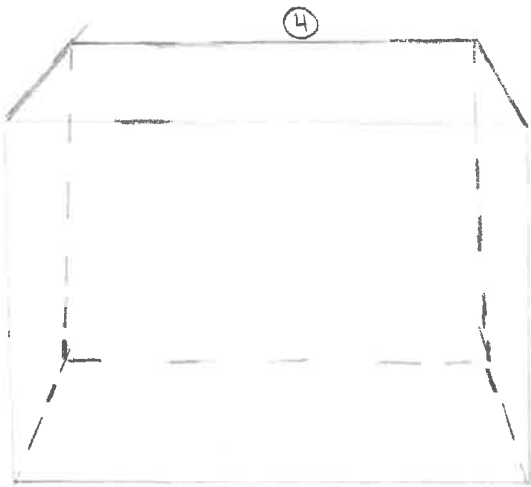
4) Angle Bisector Construction



Steps

- 1) construct angle ABC
- 2) Use compass to construct an arc centered at the vertex
- 3) Place compass at intersection of arc and ray. Place another arc in angle some distance away from the original
- 4) w/ the same compass setting create another arc intersecting the first
- 5) construct a ray from the intersection point to the vertex of the angle

Perspective Drawing



Steps

- 1) Construct a rectangular box
- 2) Draw a horizon line h and a vanishing point v
 - a) Draw the horizon so it is parallel to the top and bottom of the box
- 3) Connect the corners of the box to v w/ dashed lines
- 4) Draw the upper rear box edge parallel to line h
- 5) Create solid lines for the top of the box and dashed lines for the hidden edges.
- 6) Erase dashed lines don't need