

GEOMETRIC CONSTRUCTIONS

CONSTRUCTION # 1 - A PERPENDICULAR TO A LINE THROUGH A POINT (STEMBUS METHOD)

STEP 1: Place your compass on point A and extend the pencil slightly down so it is below the line. Draw a wide arc that goes through the line.

A •



STEP 2: Label the left intersection point B and the right intersection point C. Without changing the width of the compass, place the compass on point B and draw to the left of point B going through the left intersection point D.

STEP 3: Without adjusting the width of the compass on point C, draw an arc to the right of point A, with a straight edge or ruler, draw a line to where the two arcs intersect. This line is parallel to the original line.

YOU TRY:

CONSTRUCTION # 5 - SQUARE INSCRIBED IN A CIRCLE

STEP 1: Place a point anywhere on the circle. Using a straight edge or ruler, draw a diameter connecting the point and the center of the circle.

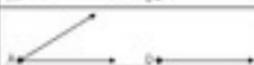


CONSTRUCTION # 2 - COPY AN ANGLE

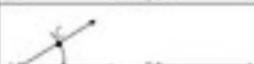
STEP 1: Draw a point beside the angle you want to copy. This will be the vertex of your new angle. Label it point D.



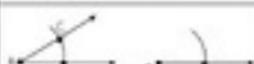
STEP 2: Draw a ray that extends from point D. Make the ray parallel to a ray in the first angle.



STEP 3: Place your compass on point A. Use the compass to draw an arc and draw an arc going through both rays. Label the points B and C.



STEP 4: Without changing the compass width, draw an arc from point D. Place your compass on point B and extend the pencil out to point C.



STEP 5: Without changing the width, move your compass to point D and draw a small arc through the arc you already have. Name this point E. Use a straight edge or ruler to connect point D and point E. This new angle will be the exact same measure as the original angle.



YOU TRY:

Includes
Video
Lesson

Geometry Notes & Practice