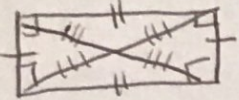
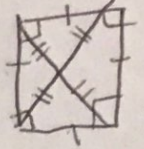
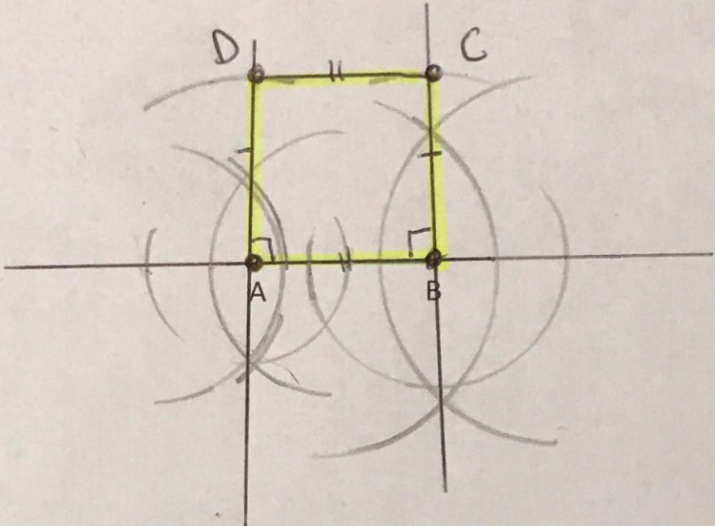


AIM: HOW DO WE CONSTRUCT A RECTANGLE AND A SQUARE?

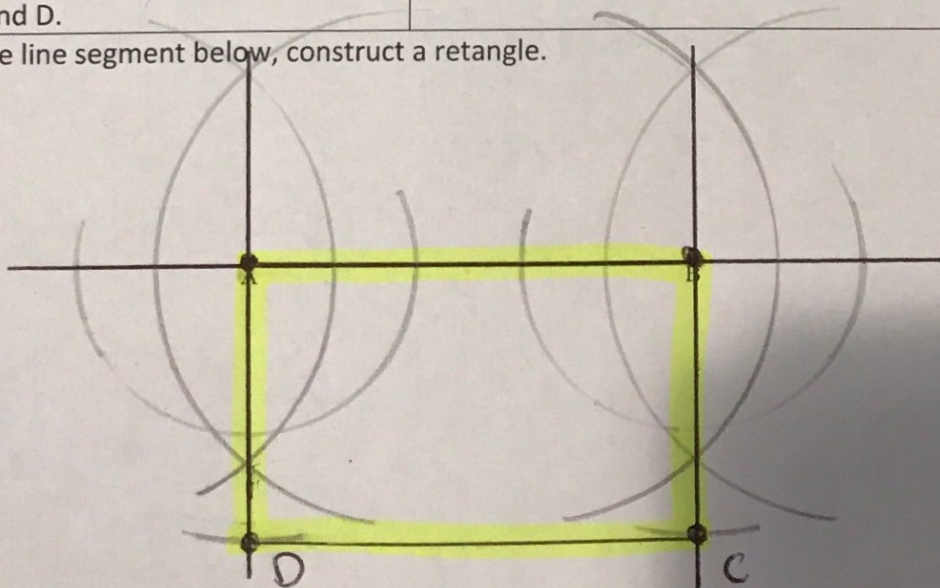
Do Now: List all the properties you know about rectangles and squares below.

RECTANGLE	SQAURE
<ul style="list-style-type: none"> - opposite sides are \cong and \parallel - All \angle's are 90° - Diagonals are \cong + bisect each other 	<ul style="list-style-type: none"> - All sides are \cong - opp. sides are \parallel - Diagonals are \cong + bisect each other - All \angle's are 90° 

CONSTRUCTING A RECTANGLE

STEPS	EXAMPLE
<ol style="list-style-type: none"> 1. Using your straight edge, extend line AB. 2. Construct a perpendicular line through point A. 3. Construct a perpendicular line through point B. 4. Set your compass to a certain width. With the pointy end on A make an arc on the perpendicular bisector. Name it C. 5. Without changing the width, put the pointy end on B and make the same arc on the perpendicular bisector. Name it D. 6. Connect C and D. 	

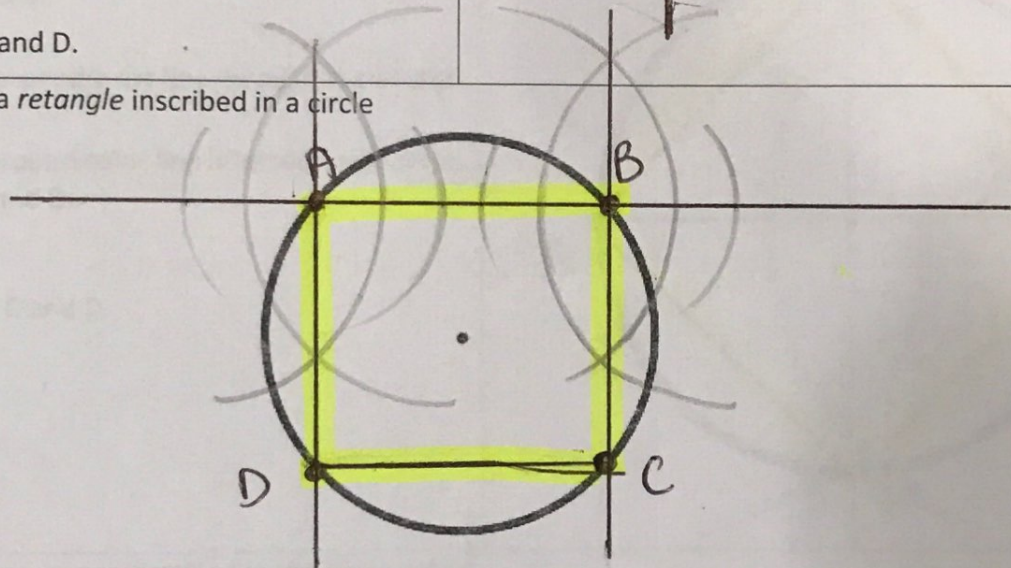
PRACTICE: Given the line segment below, construct a rectangle.



CONSTRUCTING AN INSCRIBED RECTANGLE

STEPS	EXAMPLE
<ol style="list-style-type: none"> 1. Using your straight edge, draw a secant. Label the points of intersection A and B 2. Construct a perpendicular line through point A. 3. Where the perpendicular line intersects the circle, label it C. 4. Construct a perpendicular line through point B. 5. Where the perpendicular line intersects the circle, label it D. 6. Connect C and D. 	

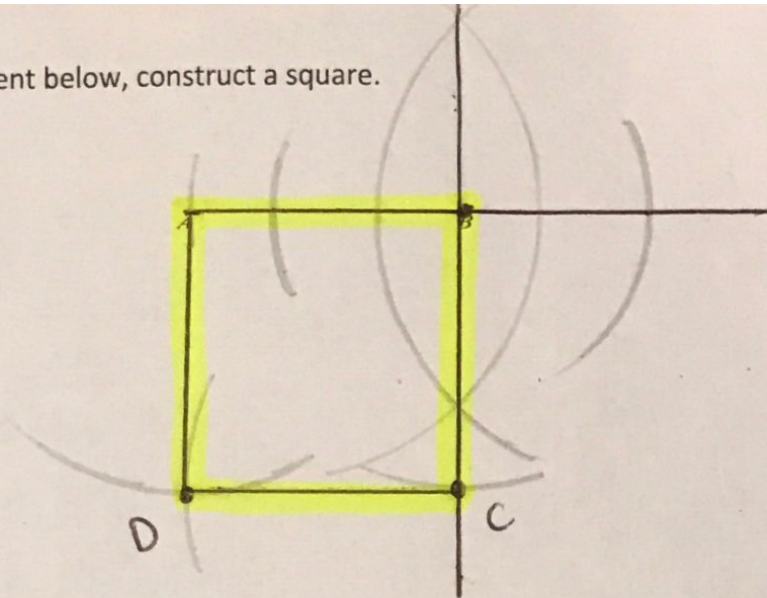
PRACTICE: Construct a *rectangle* inscribed in a circle



CONSTRUCTING A SQUARE

STEPS	EXAMPLE
<ol style="list-style-type: none"> 1. Extend AB to the right. 2. Construct a perpendicular line through point B. 3. Measure the distance between A and B in your compass, do not change the width. 4. Draw an arc above point B (on the perpendicular line). Name it C. 5. Draw an arc above point A. 6. With the pointy end on C, make an X with the arc above A. Label it D. 7. Connect A, B, C and D. 	

PRACTICE: Given the line segment below, construct a square.



CONSTRUCTING AN INSCRIBED SQUARE

STEPS	EXAMPLE
<ol style="list-style-type: none"> 1. Using your straight edge, draw a diameter. Label the ends A and B. 2. Construct a perpendicular line through the center. 3. Where the perpendicular line intersects the circle, label them C and D. 4. Connect A, B, C and D. 	

PRACTICE: Construct a *square* inscribed in the circle below.

