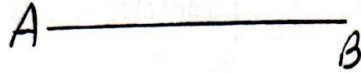


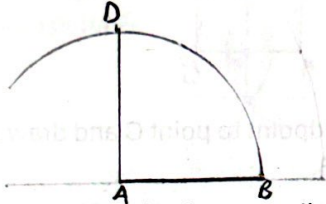
Golden Ratio Construction

Square

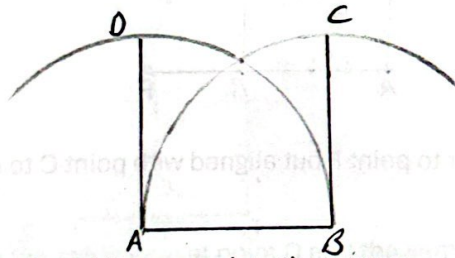
1. Draw a line with a ruler and mark points A and B.



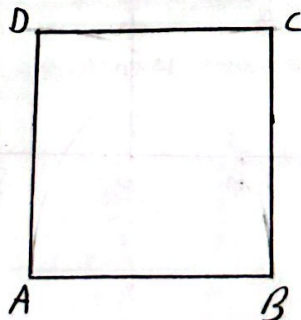
2. Extend the compass to the length of AB and draw a semicircle above point A to draw a perpendicular line to point D.



3. Repeat step 3 for point B, making point C perpendicular to B.

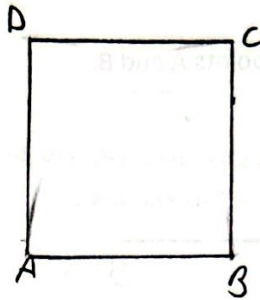


4. Connect points A, B, C, and D to complete the square.

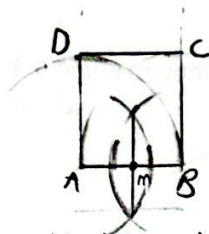


Golden Rectangle

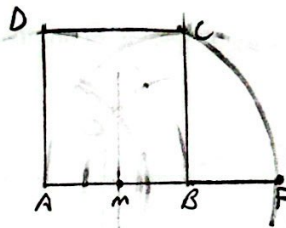
1. Construct a square.



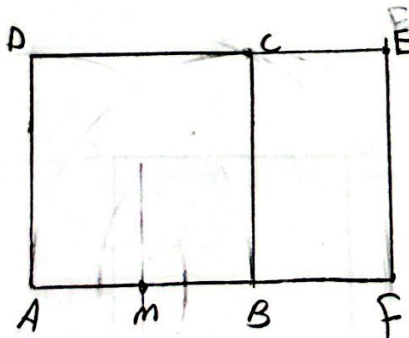
2. Extend the compass to $\sim 2/3$ of line AB and draw a semicircle from point A and point B. Where the semicircles meet is the midpoint of the line, M.



3. Extend the compass from the midpoint to point C and draw a semicircle. Mark point F where the semicircle aligns with point B.

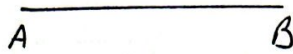


4. Mark point E perpendicular to point F but aligned with point C to create rectangle A, D, E, F.

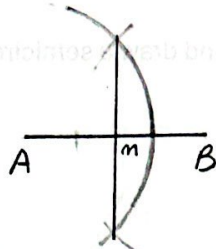


Golden Cut

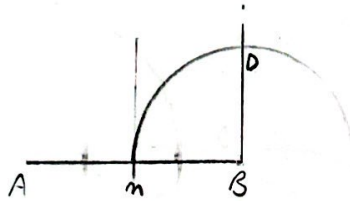
1. Draw a line with a ruler and mark points A and B.



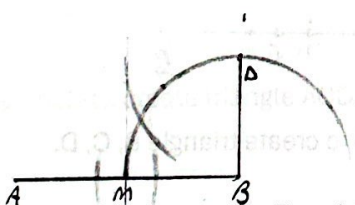
2. Extend the compass to $\sim 2/3$ of line AB and draw a semicircle from point A and point B. Where the semicircles meet is the midpoint of the line, M.



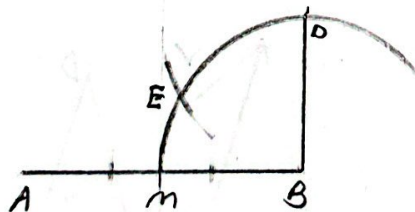
3. Extend the compass to the length of the midpoint and draw a semicircle above point B to draw a perpendicular line to point D.



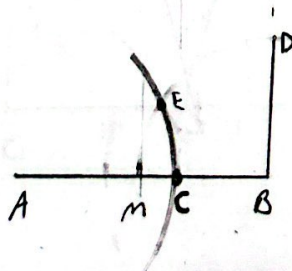
4. With the compass at the length of the midpoint, draw a semicircle at point D.



5. Label point E where the semicircle at point D and the semicircle at point B intersect.



6. With the compass at the length of line AE, draw a semicircle and label point C. This is the Golden Cut.

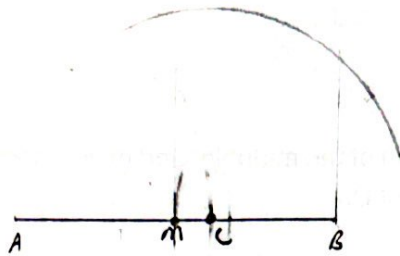


Golden Triangle (Isosceles)

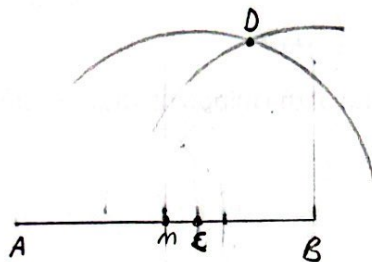
1. Draw a Golden Cut.



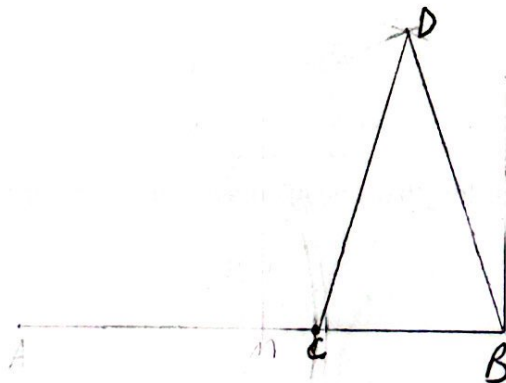
2. Extend the compass to the length of AC and draw a semicircle from point C upward.



3. Repeat step 2 for point B.



4. Connect points CD and points BD to create triangle B, C, D.

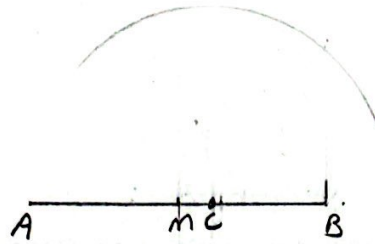


Golden Triangle (Obtuse)

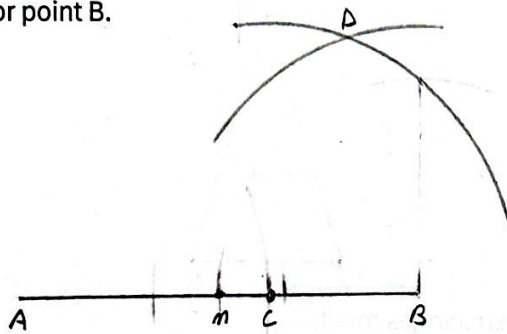
1. Draw a Golden Cut.



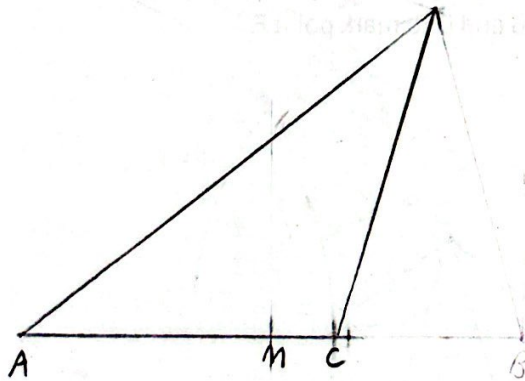
2. Extend the compass to the length of AC and draw a semicircle from point C upward.



3. Repeat step 2 for point B.

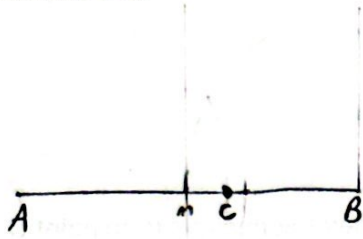


4. Connect points AD and CD to create triangle ACD.

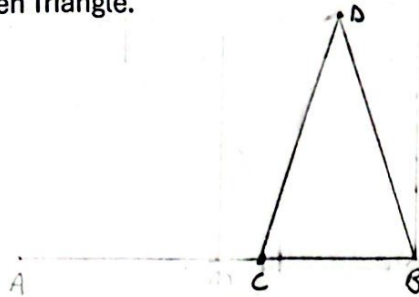


Regular Pentagon

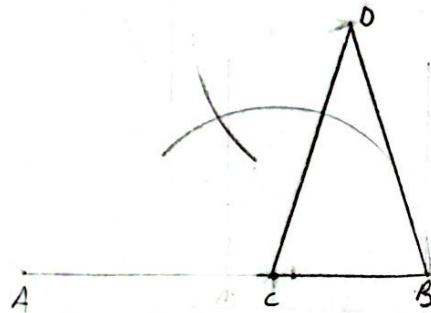
1. Draw a Golden Cut.



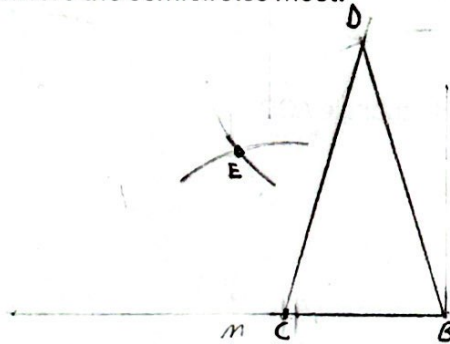
2. Draw a Golden Triangle.



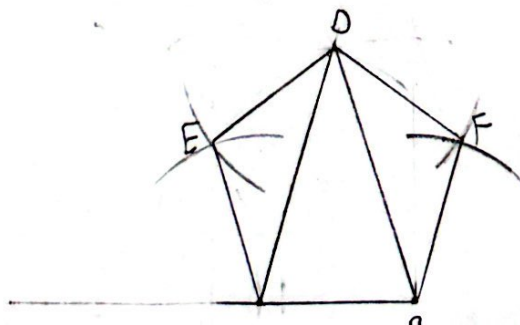
3. Extend the compass to length CB to draw semicircles at C and D.



4. Mark point E where the semicircles meet.

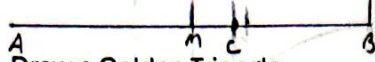


5. Repeat steps 3 and 4 for points B and D to mark point F.



Star

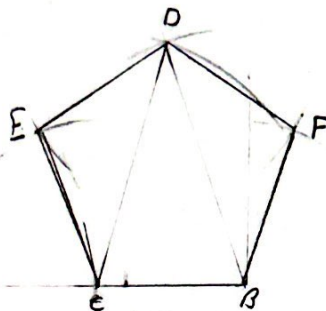
1. Draw a Golden Cut.



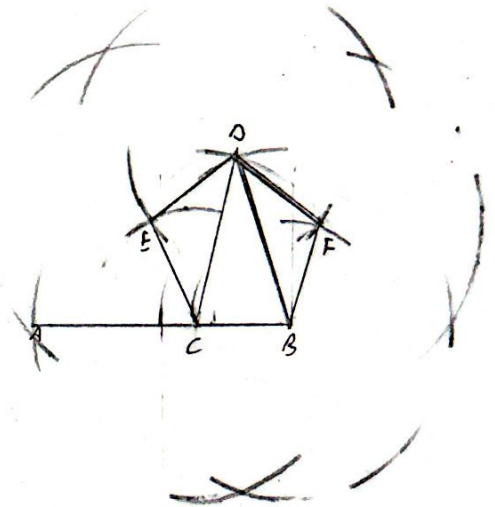
2. Draw a Golden Triangle.



3. Draw a Regular Pentagon.



4. Extend the compass to the length of AC to make semicircles at points C, B, D, E, and F.



5. Draw lines where each set of semicircles intersects.

