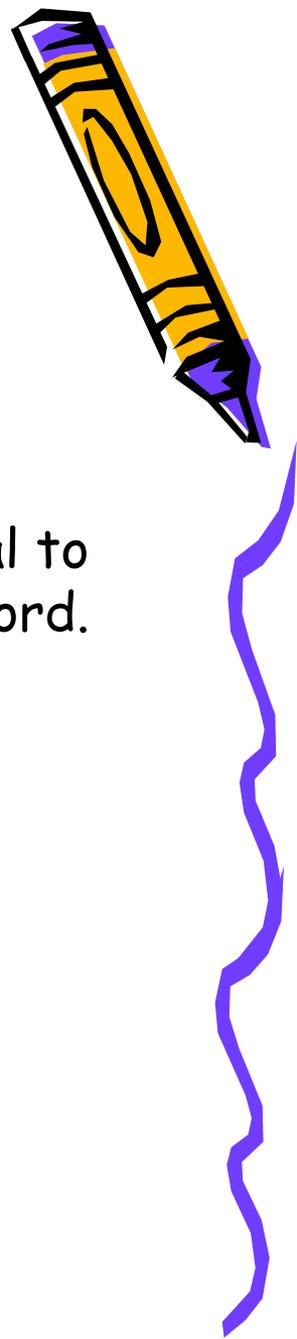


# Geometry

## Segment Lengths in Circles

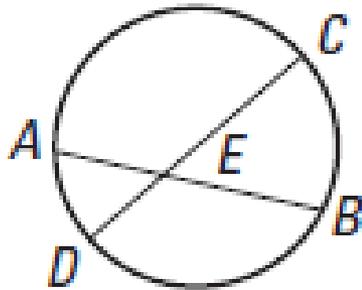


# Segment Lengths in Circles

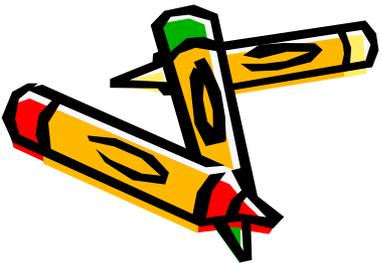


## Segments of Chords Theorem

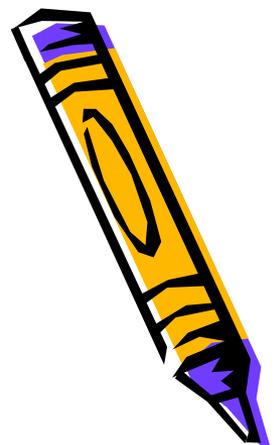
If two chords intersect in the interior of a circle, then the product of the lengths of the segments of one chord is equal to the product of the lengths of the segments of the other chord.



$$AE * EB = DE * EC$$

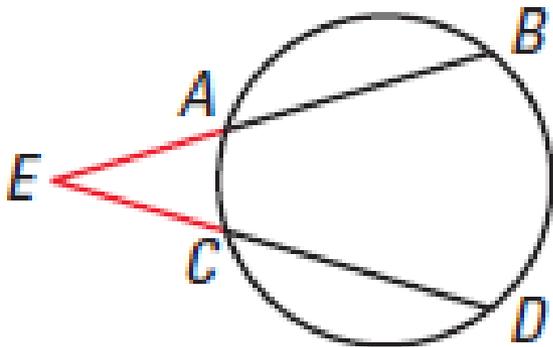


# Segment Lengths in Circles

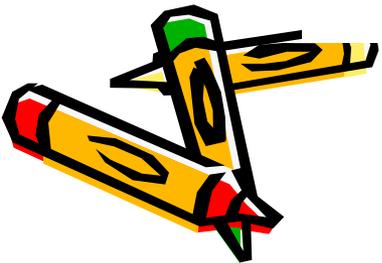


## Segments of Secants Theorem

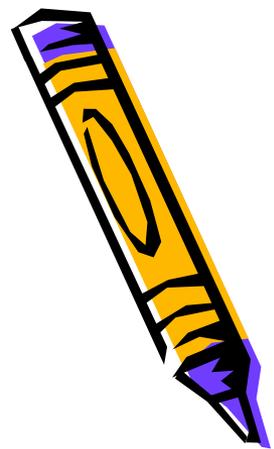
If two secant segments share the same endpoint outside a circle, then the product of the lengths of one secant segment and its external segment equals the product of the lengths of the other secant segment and its external segment.



$$EA * EB = EC * ED$$

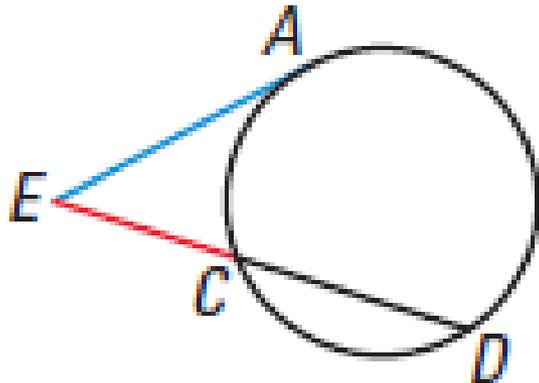


# Segment Lengths in Circles

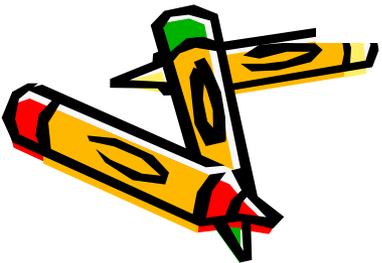


## Segments of Secants and Tangents Theorem

If a secant segment and a tangent segment share an endpoint outside a circle, then the product of the lengths of the secant segment and its external segment equals the square of the length of the tangent segment.



$$(EA)^2 = EC * ED$$



# Examples

