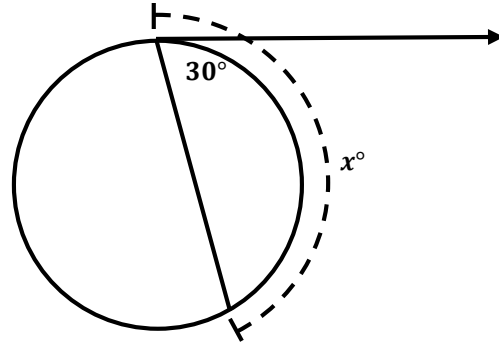


NOTES 10.6a – ANGLES FORMED BY SECANTS AND TANGENTS

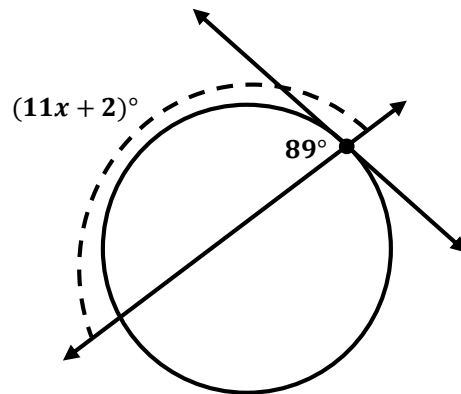
THEOREM: If a secant and a tangent intersect at the point of tangency, then the measure of each angle formed is half the measure of its intercepted arc.

EXAMPLE 1: Find the value of 'x'.



$x =$ _____

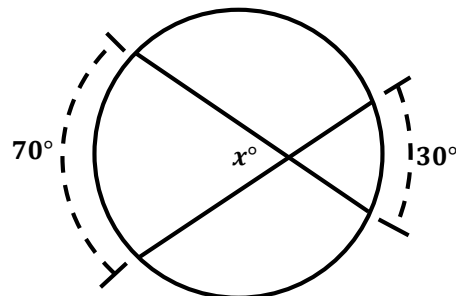
EXAMPLE 2: Find the value of 'x'.



$x =$ _____

THEOREM: If two secants intersect in the interior of a circle, then the measure of the angle formed is half the sum of the measures of the arcs intercepted by the angle and its vertical angle.

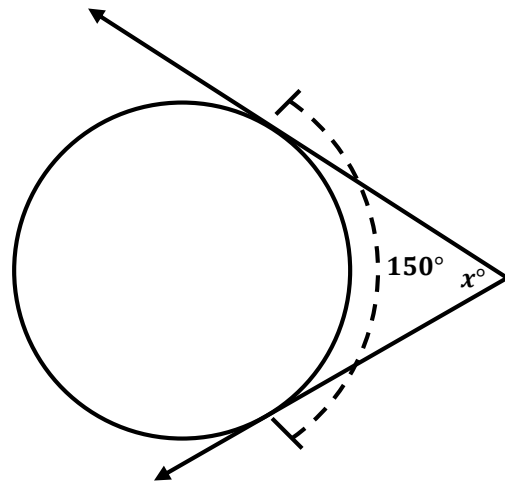
EXAMPLE 3: Find the value of 'x'.



$x =$ _____

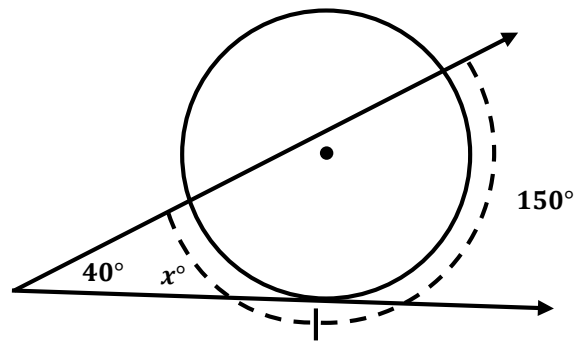
THEOREM: If two secants, a secant and a tangent, or two tangents intersect in the exterior of a circle, then the measure of the angle formed is half the POSITIVE difference of the measures of the intercepted arcs.

EXAMPLE 4: Find the value of 'x'.



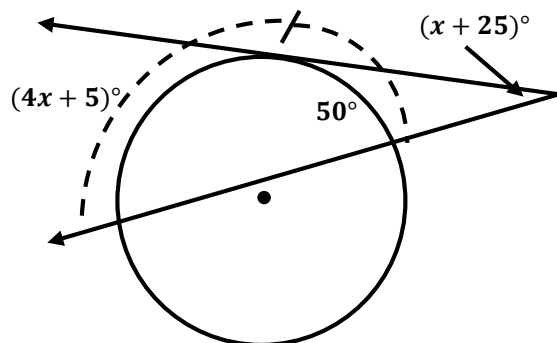
$x =$ _____

EXAMPLE 5: Find the value of 'x'.



$x =$ _____

EXAMPLE 6: Find the value of 'x'.



$x =$ _____