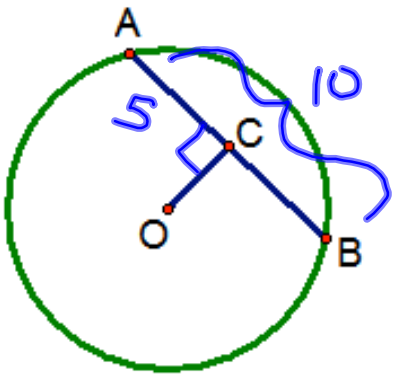
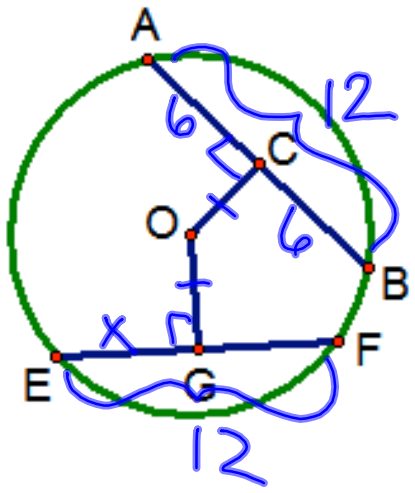
Do-now:

In circle O below, $OC \perp AB$. If AB = 10, what is the length of AC?



In circle O below, $OC \perp AB$ and $OG \perp EF$. If $\overline{OC} \cong \overline{OG}$ and AB = 12, what is the length of EG?

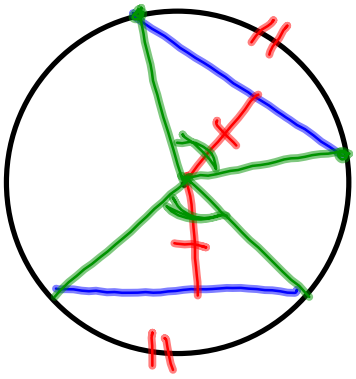


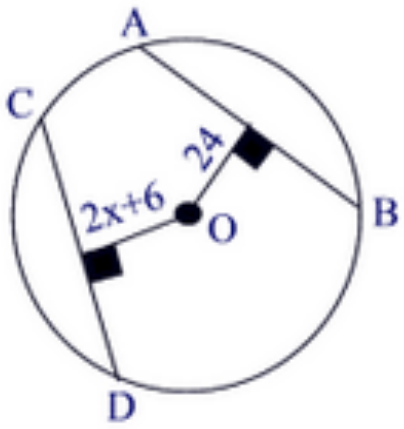
EG = 6

If two chords are equidistant from the center of the center, they are congruent.

They also intercept congruent arcs!

They also define congruent central angles!





Given: Circle O,
$AB = CD$, marked
perpendiculars

Find x.

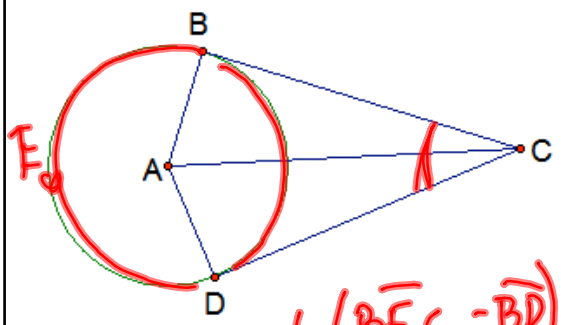
$2x+6=24$

$2x=18$

$x=9$

Given:

Circle A
Tangent BC and DC



$\overline{AD} \cong \overline{AB}$ all radii in a ⊙ are ≅

$\overline{AC} \cong \overline{AC}$ reflexive

$\angle BCD = \frac{1}{2}(\overset{\frown}{BEC} - \overset{\frown}{BD})$

$\angle D = 90$
$\angle B = 90$
} radius ⊥ tangent form 90°

$\overline{BC} \cong \overline{DC}$ 2 tangents from same point are ≅