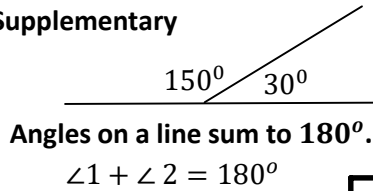
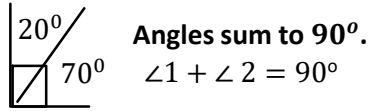


M9 - 10.0 - Parallel Lines Notes

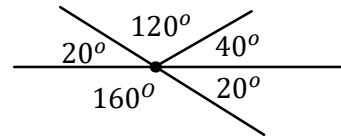
Supplementary



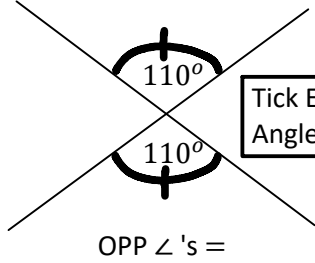
Complementary



Angles on a point add to 360 degrees



Opposite Angles are Equal.

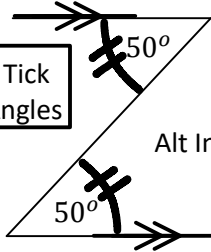


X

Tick Equal Angles

Double Tick Equal Angles

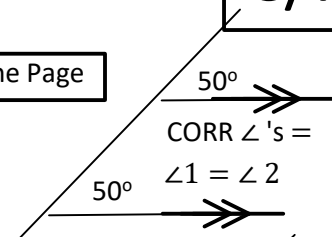
Alternate Interior Angles Equal.



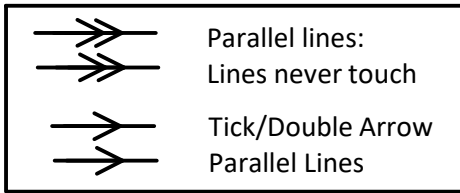
Z

Rotate the Page

Corresponding Angles Equal.



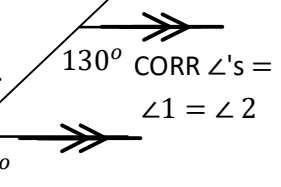
C/F



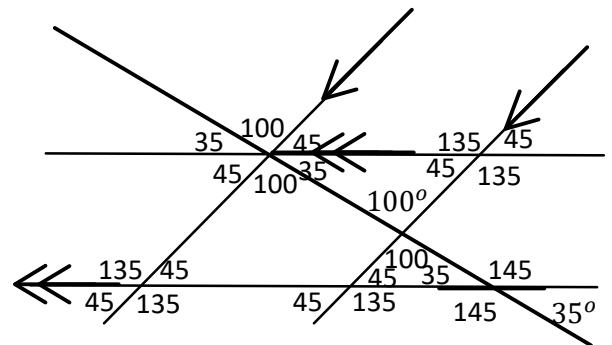
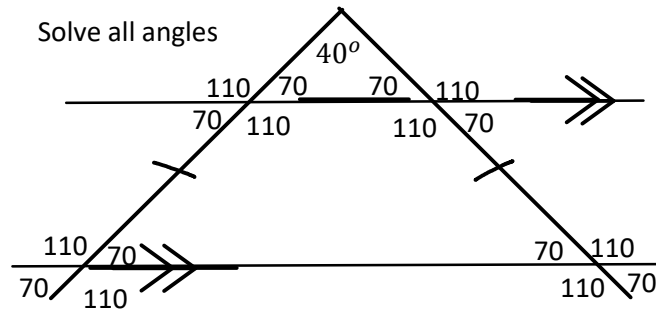
Alternate: Across a Transversal.
 Interior: Inside Parallel Lines.
 Transversal: a line through Parallel Lines.

Extend the (Parallel/Transversal) Lines

Co-Interior: Same side of a Transversal

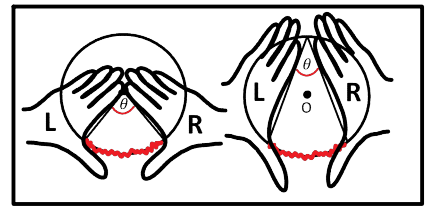
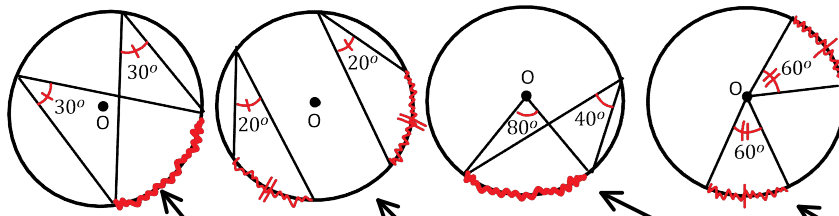


Triangles Scalene	 Isosceles	 Equilateral	 Right Angle	$a^2 + b^2 = c^2$ Congruent SSS, SAS, ASA, AAS, HL	Similar AAA	Circles $A = \pi r^2$ $C = 2\pi r$
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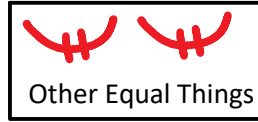


M9 - 10.0 - Circles Notes

Shade the Arc! Use Your Hands!

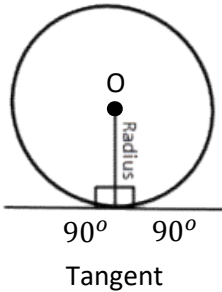


$I \angle = I \angle$
Inscribed Angles from Same/Equal Arc are Equal.



$C \angle = 2 \times I \angle$
Central Angles are
Twice Inscribed Angles
from Same/Equal Arc.

$C \angle = C \angle$
Central Angles from
Equal Arc are Equal.

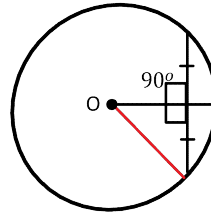


⊥: Perpendicular 90°

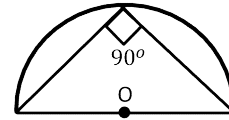
Draw a Radius

Tangent: Line
meets Circle
Edge

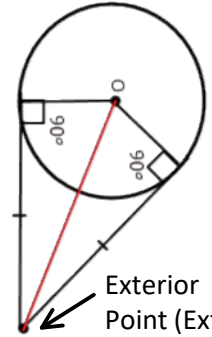
Radius ⊥ to Tangent



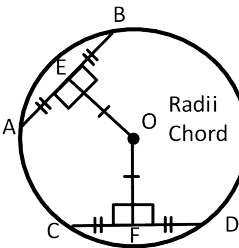
Radius ⊥ to Chord
⊥ Bisects Chord &
goes through Centre
(Bisects: Cuts in Half)



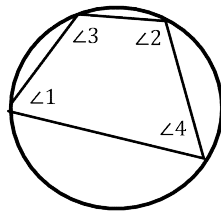
Inscribed ∠ in a
Semi-Circle = 90°



Tangents to Exterior
Points are Equal.

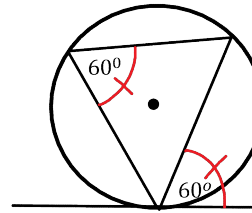


If: $OE = OF$
Then: $AB = CD$



$\angle 1 + \angle 2 = 180^\circ$
 $\angle 3 + \angle 4 = 180^\circ$

Interior Angles
in a Cyclic
Quadrilateral
sum to 360° .



∠ Between
Tangent and
Chord =
Inscribed Angle
Opposite of
Chord.

Int: Interior
Ext: Exterior
 n : # of Sides
 Σ : Sum

$$\text{Int } \angle's = \frac{\# \Delta's \times 180^\circ}{n}$$

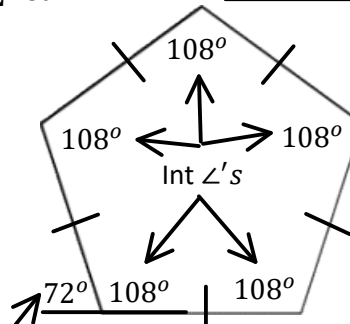
OR

$$\Sigma \text{Int } \angle = (n - 2) \times 180^\circ$$

$$\Sigma \text{Int } \angle = (5 - 2) \times 180^\circ$$

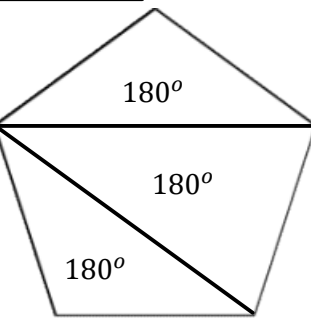
$$\Sigma \text{Int } \angle = 3 \times 180^\circ$$

$$\Sigma \text{Int } \angle = 540^\circ$$



Pentagon: 5 Sides

$$\text{Ext } \angle's \Sigma = 360^\circ$$



Draw Triangles to Vertices
(Without Overlap)

$$\text{Int } \angle = \frac{\Sigma \text{Int } \angle's}{n} = \frac{(n-2) \times 180^\circ}{n}$$

$$\text{Int } \angle = \frac{540^\circ}{5}$$

$$\text{Int } \angle = 108^\circ$$