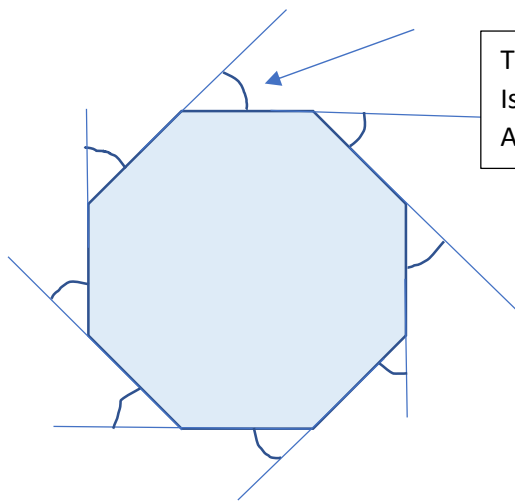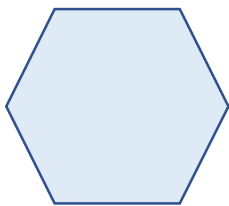# Angles in a regular polygon

The total of the Exterior angles of a polygon
Is always 360. If the polygon is regular then
All the angles are identical so…

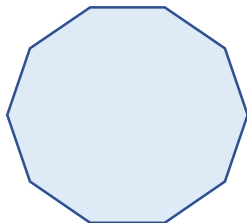| Ext. Angles	Sides
360	8
45	1

An exterior angle and an interior angle always add up to 180 so…
The interior angle of a regular 8-sided polygon is
180-45=135

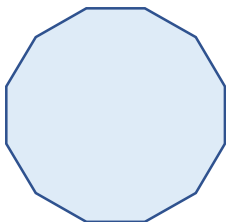| Ext. Angles	Sides
360	6
	1

Hexagon:
An exterior angle = _____
An interior angle = _____

Regular 10-sided polygon:
An exterior angle = _____
An interior angle = _____

Regular 12-sided polygon:
An exterior angle = _____
An interior angle = _____
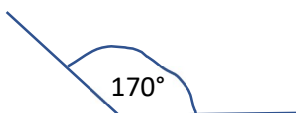
Mystery polygon:
An interior angle = 170 °
An exterior angle = _____
Number of sides =

170°