

Special Pairs of Angles

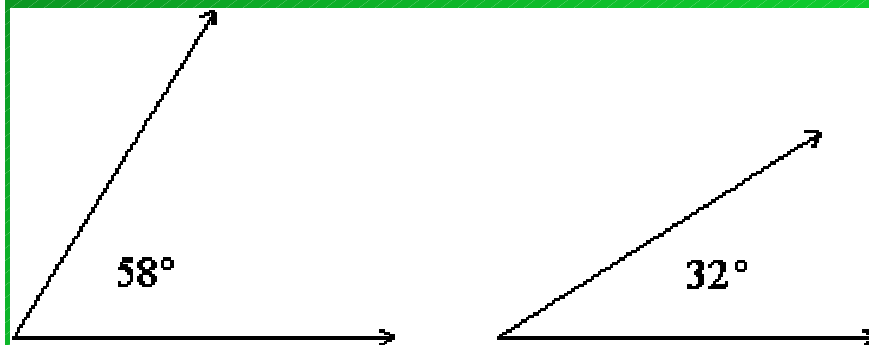
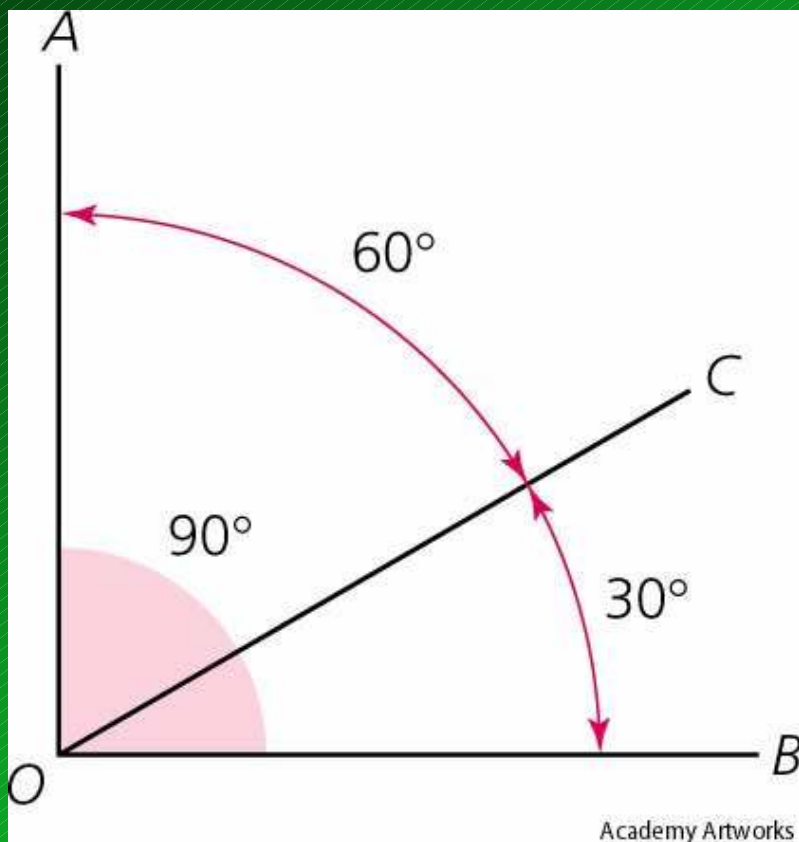
Lesson 8-3





Complementary Angles

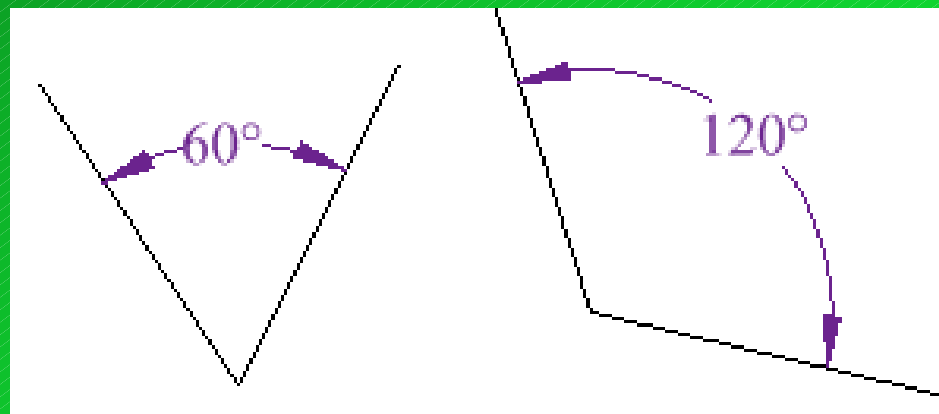
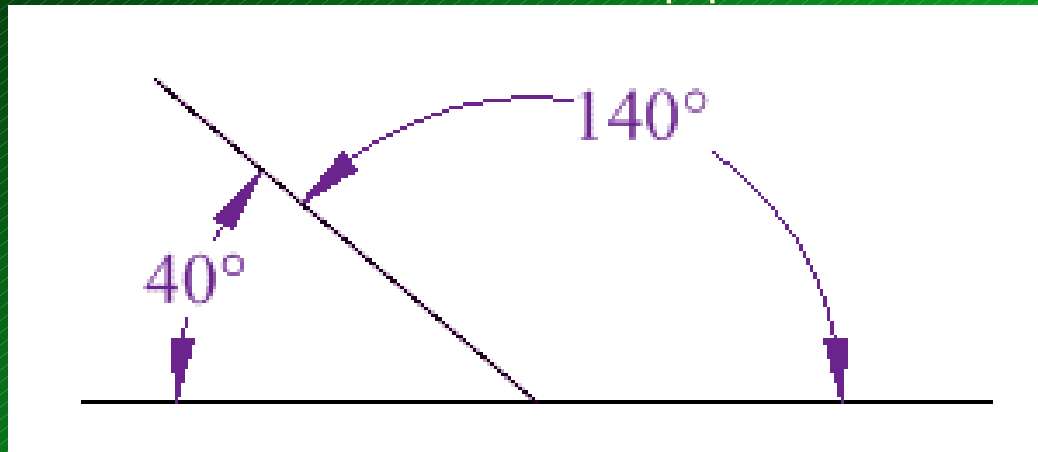
If the sum of the measures of two angles is exactly 90° then the angles are complementary.





Supplementary Angles

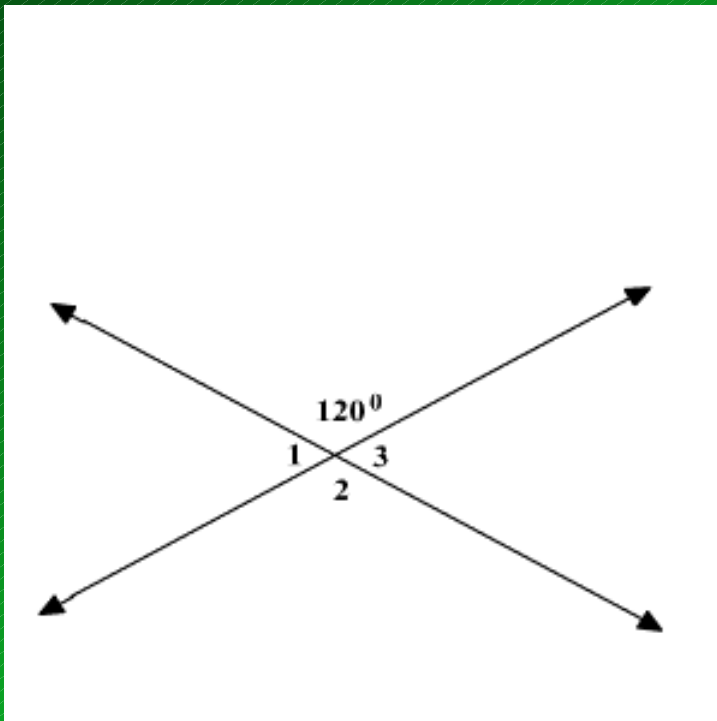
If the sum of the measures of two angles is exactly 180° then the angles are supplementary.





Vertical Angles

Vertical angles are formed by two intersecting lines. They are the angles that are opposite each other. Vertical angles are **congruent** (they have equal measures).



In this picture, $\angle 1$ and $\angle 3$ are vertical angles.

What is the measure of $\angle 2$?

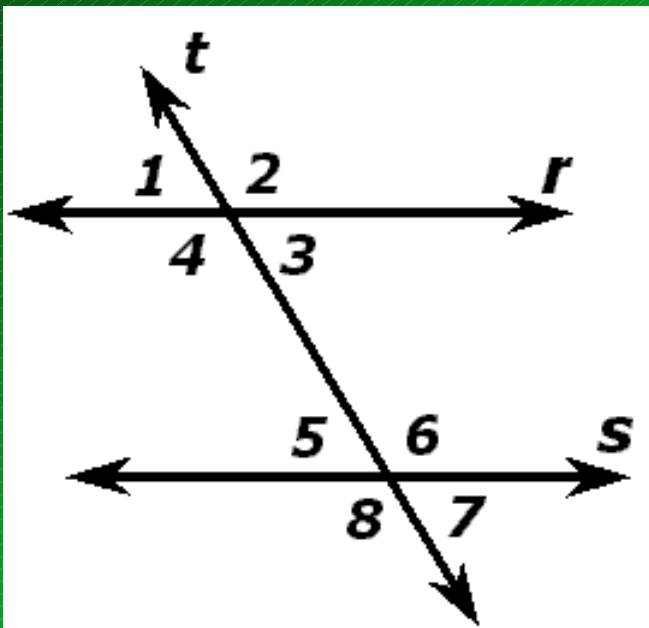
$\angle 2$ is 120° because it is congruent to the vertical angle across from it.

Transversals



A transversal crosses two or more lines at different points:

- Interior angles are on either side of a transversal between a pair of lines.
- Exterior angles are on either side of a transversal outside of a pair of lines.



Angles 3, 4, 5, and 6 are interior angles.

Angles 1, 2, 7, and 8 are exterior angles.



Homework Time!