

NAME _____

Module 8 **Points, Lines, Angles, and Triangles**
Lesson 3 **Angle Relationships and Parallel Lines**

Lesson Objective

- Recognize the pairs of angles formed and the relationship between the angles including two intersecting lines and parallel lines cut by a transversal (vertical, supplementary, complementary, corresponding, alternate interior, alternate exterior angles, and linear pair).

Subtopic 1 **Angle Relationships**

Complementary Angles

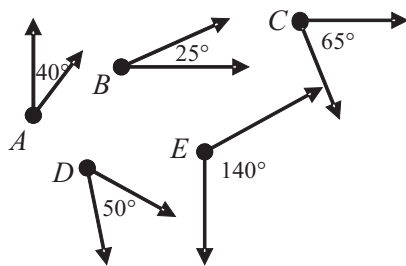
_____ angles whose measures have a sum of _____

Supplementary Angles

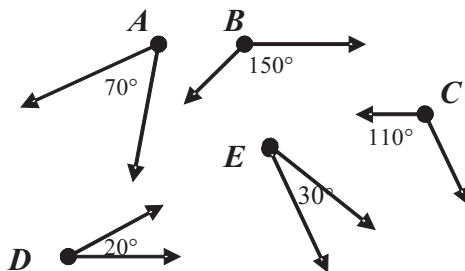
_____ angles whose measures have a sum of _____

Two angles that form a _____ are supplementary.

- 1** Name each pair of complementary angles.



- 2** Name each pair of supplementary angles.



Subtopic 2 Intersecting Lines and Transversals

Intersecting Lines

Two or more lines that share a _____ point

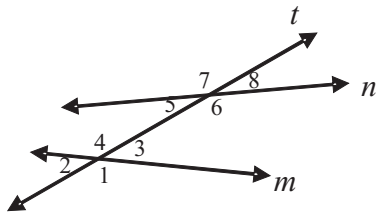
Vertical Angles

- Two angles formed by _____ lines
- Do not have any common sides
- Have a _____

Vertical angles are _____.

A _____ is a line that intersects two coplanar lines at different points.

- 3 Lines m and n are intersected by transversal t . Name each special angle pair.



$\angle 2$ and $\angle 8$

$\angle 1$ and $\angle 6$

$\angle 3$ and $\angle 5$

Subtopic 3 Parallel Lines and Transversals

If two parallel lines are cut by a transversal, the _____ are congruent.

If two _____ lines are cut by a transversal, the alternate exterior angles are _____.

If two parallel lines are cut by a transversal, the _____ angles are congruent.

- 4 Lines a and b are parallel.
Find $m\angle 1$, $m\angle 8$, and $m\angle 7$.

