Chapter 1
Basics of Geometry

1.6 - Describing Pairs of Angles

Vocabulary

complementary angles – two angles whose measures sum to 90˚

supplementary angles – two angles whose measures sum to 180˚
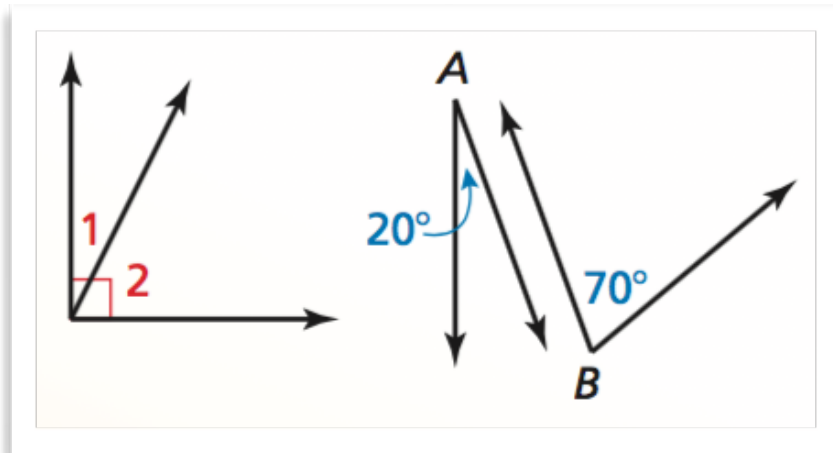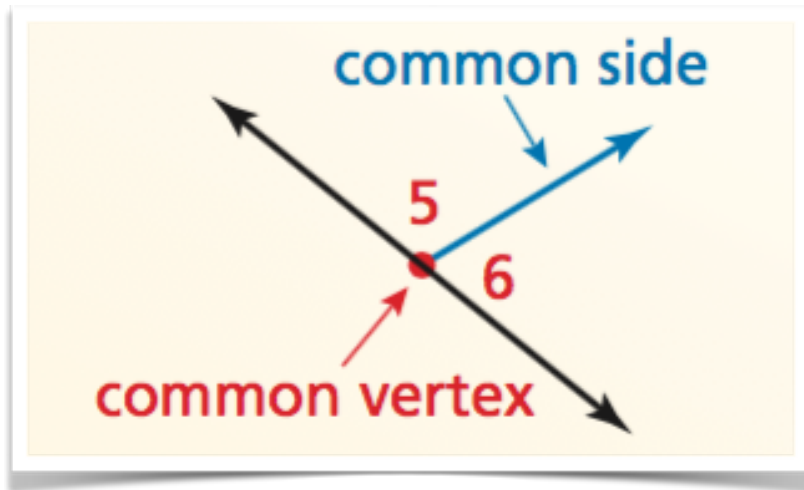

angle 1 is the
complement of angle 2
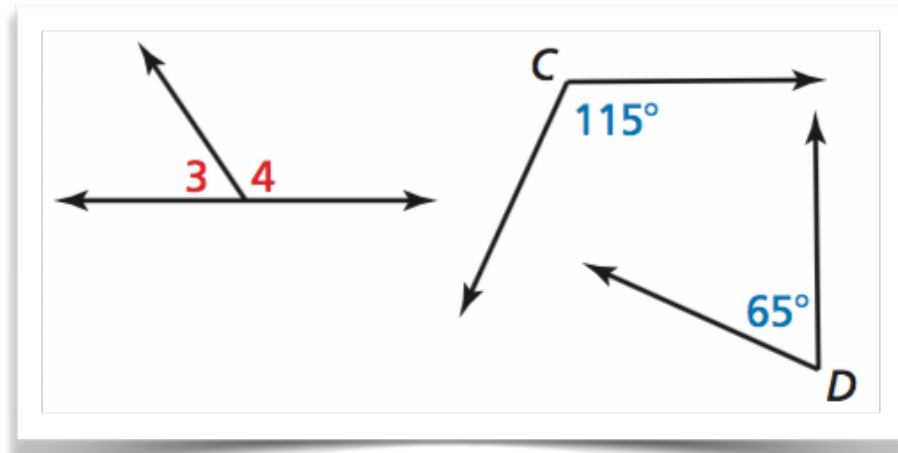
angle C is the
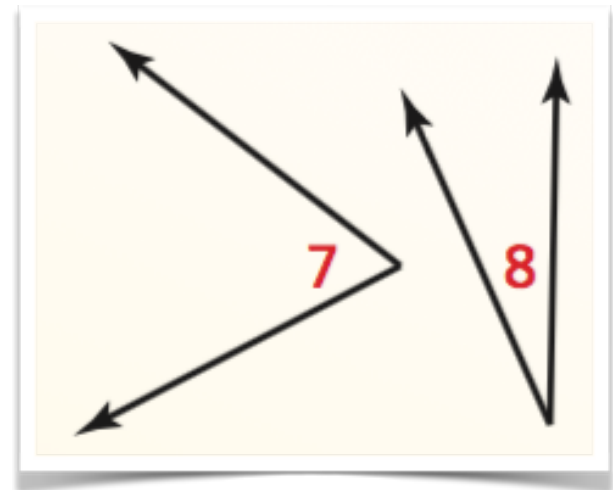**supplement** of angle D

1.6 - Describing Pairs of Angles

Vocabulary

adjacent angles - two coplanar angles that share a common side and a common vertex, but have no common interior points
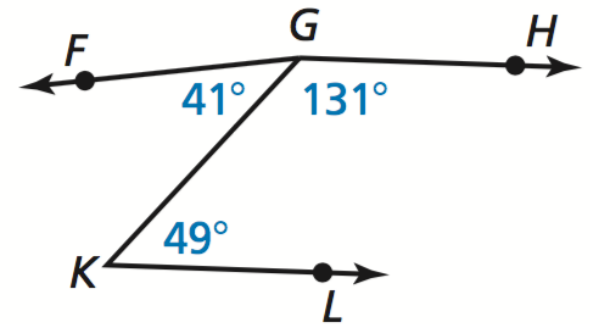

angles 5 and 6 are
adjacent angles

angles 7 and 8 are
nonadjacent angles

1.6 - Describing Pairs of Angles

Example

1. Using the diagram to the right, name a pair of complementary angles, supplementary angles, and a pair of adjacent angles.
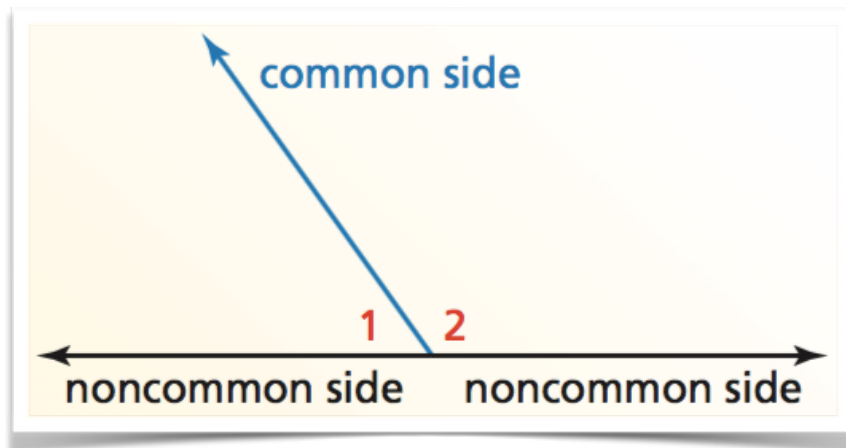

2. Assume $\angle 1$ is a complement of $\angle 2$, and $m\angle 2 = 17°$, Determine $m\angle 1$.

3. Assume $\angle 3$ is a supplement of $\angle 4$, and $m\angle 3 = 121°$, Determine $m\angle 4$.
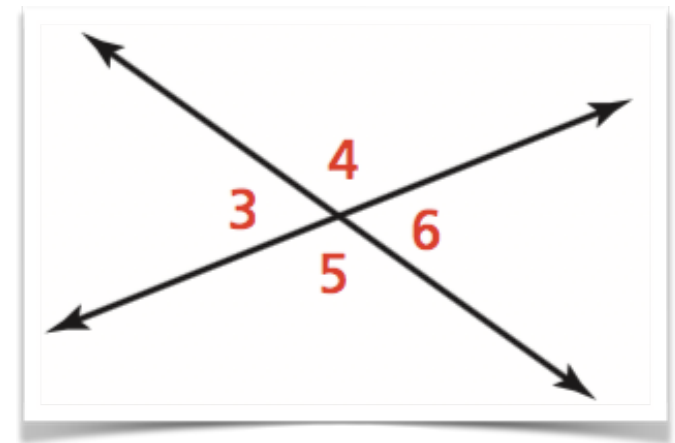
1.6 - Describing Pairs of Angles

Vocabulary

linear pair - two adjacent angles whose measures sum to 180˚

vertical angles - nonadjacent angles formed by two intersecting lines

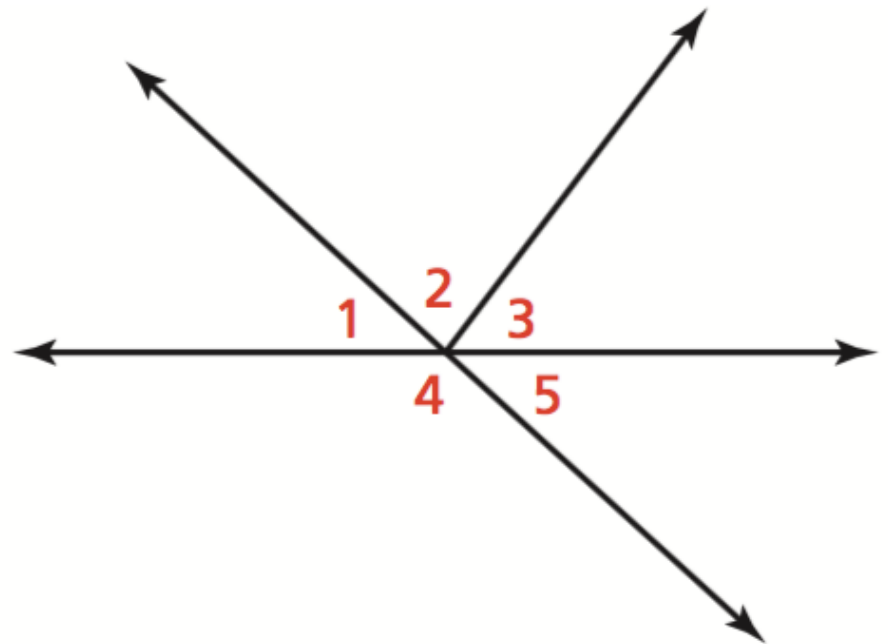angle 1 is the **supplement** of angle 2

angles 3 and 4 are **vertical** angles; angles 4 and 5 are **vertical** angles

1.6 - Describing Pairs of Angles
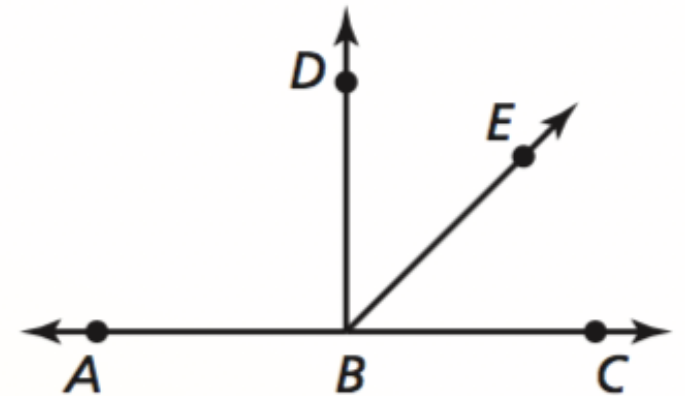
Example

1. Name the vertical angles

2. Name the linear pairs

1.6 - Describing Pairs of Angles

Interpreting a diagram

We can assume:

We cannot assume: