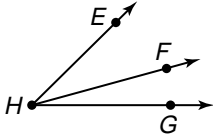
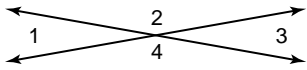
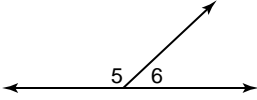

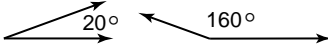


Study Guide

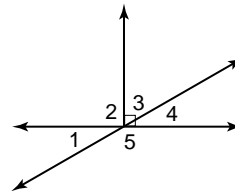
Angle Relationships

The following table identifies several different types of angles that occur in pairs.

Pairs of Angles		
Special Name	Definition	Examples
adjacent angles	angles in the same plane that have a common vertex and a common side, but no common interior points	 <p>$\angle EHF$ and $\angle FHG$ are adjacent angles.</p>
vertical angles	two nonadjacent angles formed by two intersecting lines (Vertical angles are congruent.)	 <p>$\angle 1$ and $\angle 3$ are vertical angles. $\angle 2$ and $\angle 4$ are vertical angles. $\angle 1 \cong \angle 3$, $\angle 2 \cong \angle 4$</p>
linear pair	adjacent angles whose noncommon sides are opposite rays	 <p>$\angle 5$ and $\angle 6$ form a linear pair.</p>
complementary angles	two angles whose measures have a sum of 90	
supplementary angles	two angles whose measures have a sum of 180	

Identify each pair of angles as adjacent, vertical, complementary, supplementary, and/or as a linear pair.

- $\angle 1$ and $\angle 2$
- $\angle 1$ and $\angle 4$
- $\angle 3$ and $\angle 4$
- $\angle 1$ and $\angle 5$



Find the value of x .

