

Angle Relationships classwork

- **Adjacent angles:** angles in a plane that have a common _____ and a common _____, but no common interior points. Please draw an example:

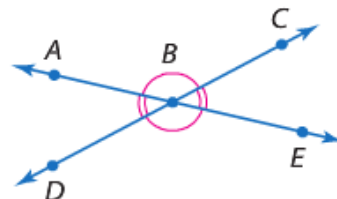
- **Linear pair:** adjacent angles whose non-common sides are opposite rays. Please draw an example:

- **Vertical angles:** two nonadjacent angles formed by two intersecting lines. Please draw an example:

KeyConcept Angle Pair Relationships

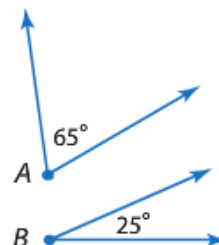
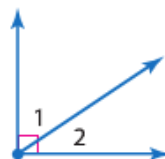
Vertical angles are congruent.

Examples $\angle ABC \cong \angle DBE$ and $\angle ABD \cong \angle CBE$



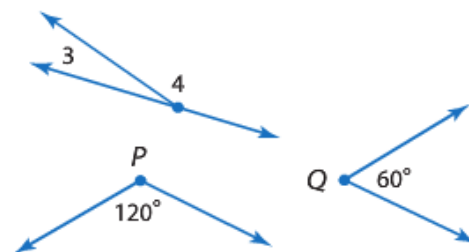
Complementary angles are two angles with measures that have a sum of 90.

Examples $\angle 1$ and $\angle 2$ are complementary.
 $\angle A$ is complementary to $\angle B$.



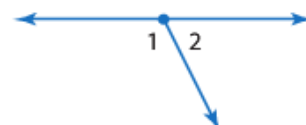
Supplementary angles are two angles with measures that have a sum of 180.

Examples $\angle 3$ and $\angle 4$ are supplementary.
 $\angle P$ and $\angle Q$ are supplementary.



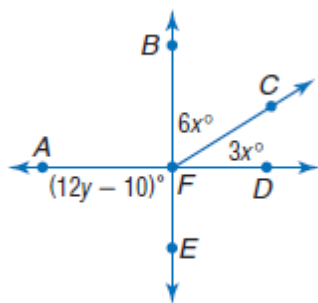
The angles in a linear pair are supplementary.

Example $m\angle 1 + m\angle 2 = 180$



Ex #1: Find the measures of two complementary angles if the difference in the measures of the two angles is 12.

Ex #2: Find x and y so that \overrightarrow{BE} and \overrightarrow{AD} are perpendicular.



Perpendicular Lines: lines that intersect to form right angles. The symbol is: \perp

Ex#3: Find x and y so that \overrightarrow{PR} and \overrightarrow{SQ} are perpendicular.

