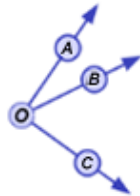


Vocabulary: Investigating Angle Theorems

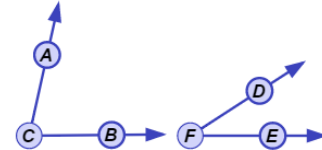


Vocabulary

- Complementary angles – two angles whose measures add to 90° .
 - Complementary angles (also called *complements*) can be *adjacent* (sharing a common side and a common vertex) or *nonadjacent*.



Adjacent complementary angles

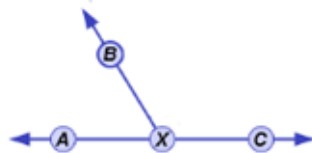


Nonadjacent complementary angles

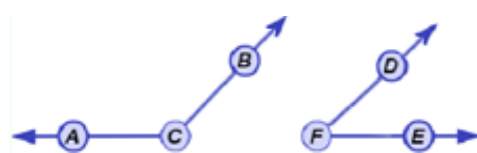
- Linear pair – two adjacent angles whose non-common sides form a straight line.
 - In the figure shown to the right, rays \overrightarrow{XA} and \overrightarrow{XC} form a straight line, so $\angle AXB$ and $\angle BXC$ form a linear pair.



- Supplementary angles – two angles whose measures add to 180° .
 - Supplementary angles (also called *supplements*) can be *adjacent* or *nonadjacent*.



Adjacent supplementary angles



Nonadjacent supplementary angles

- Vertical angles – two nonadjacent angles formed by intersecting lines.
 - A pair of intersecting lines forms two pairs of vertical angles.
 - The vertical angles in the figure to the right are $\angle AOB$ and $\angle DOC$, and $\angle AOD$ and $\angle BOC$.

