

5.3 Learning Opportunity

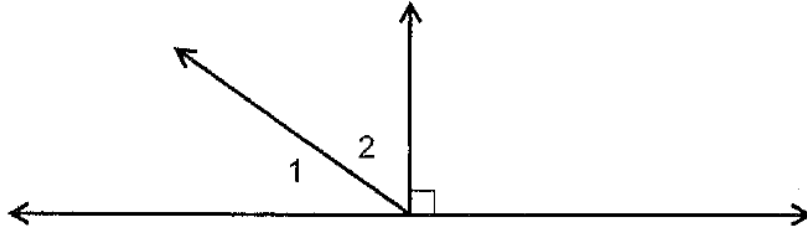
Angle Pairs



Name: _____

Complementary Angles

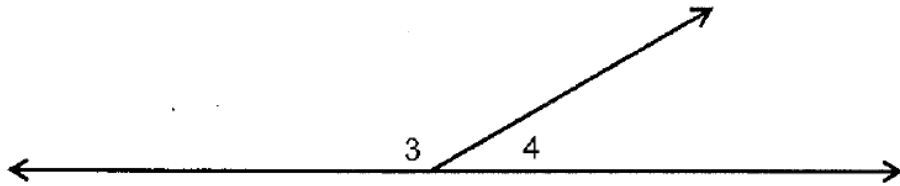
- A pair of angles is **complementary** if the sum of their measures is 90° . Each angle is called the complement of the other.



$\angle 1$ is the complement of $\angle 2$. If $\angle 1$ measures 35° then $\angle 2$ measures 55° since $90^\circ - 35^\circ = 55^\circ$.

Supplementary Angles

- A pair of angles is **supplementary** if the sum of their measures is 180° . Each angle is called the supplement of the other.



$\angle 3$ is the supplement of $\angle 4$. If $\angle 3$ measures 150° , then $\angle 4$ measures 30° since $180^\circ - 150^\circ = 30^\circ$.

Determine whether each pair of angles is complementary, supplementary, or neither.

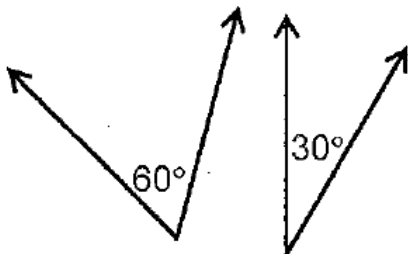
1. $m\angle ABC = 50^\circ, m\angle PQR = 30^\circ$

2. $m\angle ABC = 110^\circ, m\angle PQR = 70^\circ$

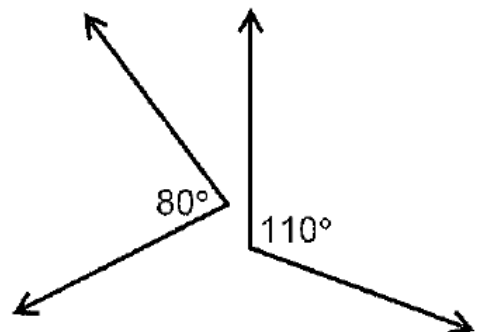
3. $m\angle ABC = 45^\circ, m\angle PQR = 45^\circ$

4. $m\angle ABC = 115^\circ, m\angle PQR = 65^\circ$

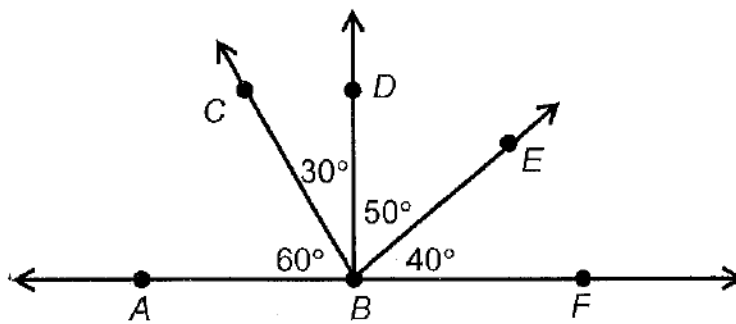
5.



6.



Use the diagram to answer questions 7 and 8.



7. Name a pair of complementary angles in the diagram.
8. Name a pair of supplementary angles in the diagram.
9. If the measure of an angle is 75° , what is the measure of its complement?
10. If the measure of an angle is 85° , what is the measure of its supplement?