

Name _____

Regular → Ch. 1 Geometry Basics

Date _____ Period _____

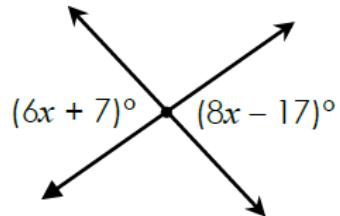
1.5 Angle Pairs

1. $\angle 1$ and $\angle 2$ form a linear pair. If $m\angle 1 = (5x + 9)^\circ$ and $m\angle 2 = (3x + 11)^\circ$, find the measure of each angle.

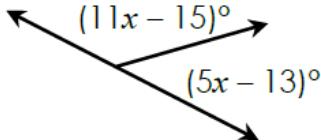
2. $\angle 1$ and $\angle 2$ are vertical angles. If $m\angle 1 = (17x + 1)^\circ$ and $m\angle 2 = (20x - 14)^\circ$, find $m\angle 2$.

3. $\angle K$ and $\angle L$ are complementary angles. If $m\angle K = (3x + 3)^\circ$ and $m\angle L = (10x - 4)^\circ$, find the measure of each angle.

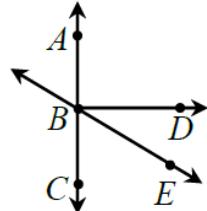
4. Find the value of x .



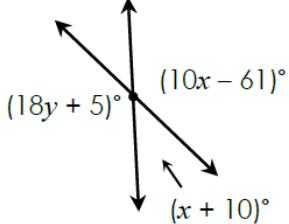
5. Find the value of x .



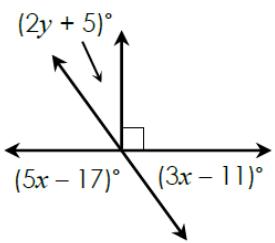
6. If $\overrightarrow{BD} \perp \overrightarrow{AC}$, $m\angle DBE = (2x - 1)^\circ$, and $m\angle CBE = (5x - 42)^\circ$, find the value of x .



7. Find the values of x and y .



8. Find the values of x and y .



9. If \overrightarrow{NP} bisects $\angle MNQ$, $m\angle MNQ = (8x + 12)^\circ$, $m\angle PNQ = 78^\circ$, and $m\angle RNM = (3y - 9)^\circ$, find the values of x and y .

