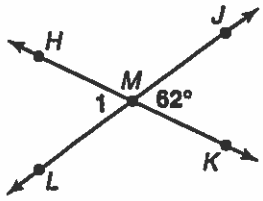
Name _____ Class _____ Date _____

Practice 7-1

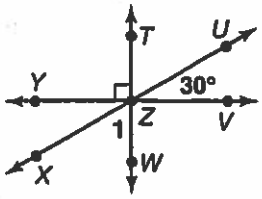
Pairs of Angles

Name a pair of vertical angles and a pair of adjacent angles in each figure. Find $m\angle 1$.

1.



2.



_____ _____

_____ _____

_____ _____

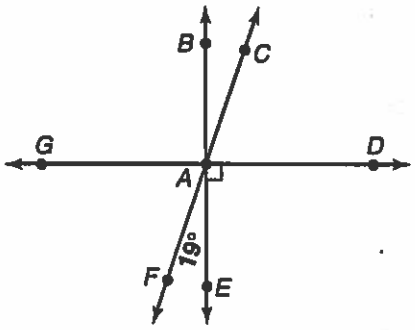
Find the measure of the supplement and the complement of each angle.

3. 10° _____

4. 42.5° _____

5. 80° _____

Use the diagram below for Exercises 6–9. Decide whether each statement below is true or false.



6. $\angle GAF$ and $\angle BAC$ are vertical angles. _____

7. $\angle EAF$ and $\angle EAD$ are adjacent angles. _____

8. $\angle CAD$ is a complement of $\angle EAF$. _____

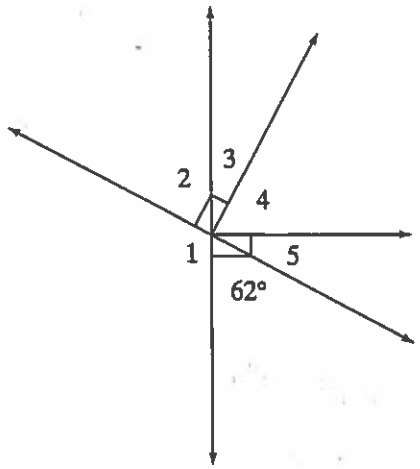
9. $m\angle DAF = 109°$ _____

Name _____ Class _____ Date _____

Puzzle 7-1

Pairs of Angles

Study the figure and use what you know about pairs of angles to find the measure of angles shown. Use the equations at the bottom of the page to check your answers.



$m\angle 1 =$ _____ $m\angle 2 =$ _____ $m\angle 3 =$ _____ $m\angle 4 =$ _____ $m\angle 5 =$ _____

$A = m$(the largest labeled angle in the figure) + 62°

$B = m$(the angle adjacent to $\angle 4$ but not to $\angle 2$) + 62°

$C = m$(the supplementary angle to $\angle 1$) + $m\angle 3$

$D = m$(the angle adjacent to $\angle 1$ and $\angle 3$) + m(the angle adjacent to $\angle 2$ and $\angle 4$) + $m\angle 5$ + 62°

$E = m\angle 1 + m$(the angle vertical to $\angle 2$)

$$A + B + C + D + E = 720°$$