MGF 1106 9.1 Geometry Terms, Names, & Symbols

1 – 6: Give the appropriate symbol and methods for naming each of these geometric shapes:

1. Point:
2. Line Segment (or segment):
3. Ray:
4. Line:
   Note: Half open or open indicates one or both end(s) open.

5. Plane:
6. Angle – Vertex –

7 – 9: Definitions related to angles:
7. Acute – Right –
   Obtuse – Straight -
8. Complementary – Supplementary -
9. Adjacent – Vertical -

Exercises: Using the diagram at the right give 2 examples of:
   a. An acute angle
   b. An obtuse angle
   c. A right angle
   d. A straight angle
   e. A pair of:
      1. Adjacent angles
      2. Complementary angles
      3. Supplementary angles
      4. Vertical angles
B. Use the diagram at the right to solve the following

1. If $m \angle 2 = 20$, $m \angle 3 =$ ?
2. If $m \angle 3 = 42$, $m \angle 5 =$ ?
3. If $m \angle 3 = 42$, $m \angle 4 =$ ?

C. Determine the value for $x$ if:

1. $m \angle 2 = 3x - 8$, $m \angle 3 = 10x + 20$
2. $m \angle 3 = 6x - 4$, $m \angle 5 = 9x - 19$
3. $m \angle 4 = 2x + 50$, $m \angle 5 = 7x + 10$

10. "Congruent" Angles formed by parallel lines

Exercises:

A. If $m \angle 1 = 150^\circ$, $m \angle 5 =$ _______

If $m \angle 1 = 150^\circ$, $m \angle 4 =$ _______

Which other angle measures $150^\circ$? _______

$m \angle 2 = m \angle 3 = m \angle 6 = m \angle 7 =$ _______

B. If $m \angle 6 = 40^\circ$, determine:

$m \angle 1 =$ _______  $m \angle 2 =$ _______  $m \angle 3 =$ _______  $m \angle 4 =$ _______

$m \angle 5 =$ _______  $m \angle 7 =$ _______  $m \angle 8 =$ _______

Homework: 9.1 Read pages 430 – 432, Work Problems 5-12, 13, 15, 17, 18, 45 – 70, and 75 – 86