Geometry **1.5 & 1.6 Quiz Review** **Date:** _____

- What is the definition of the Segment Addition Postulate? Draw a diagram and give an equation that represents it.

$AB + BC = AC$

- What is the definition of the Angle Addition Postulate? Draw a diagram and give an equation that represents it.

$\angle AOB + \angle BOC = \angle AOC$

Vocabulary: *Midpoint, angle, acute angle, right angle, obtuse angle, straight angle, vertical angle, adjacent angle, complementary angle, supplementary angle.*

Use the line segment below for questions 1 – 3.

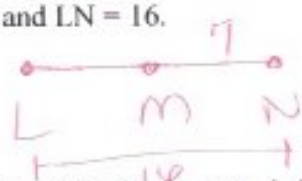
1. If M is the midpoint of $\overline{LN}$, find x if LM = 4x – 3 and MN = 5x – 10.

x = 7

$4x - 3 = 5x - 10$
$-3 = x - 10$
$x = 7$

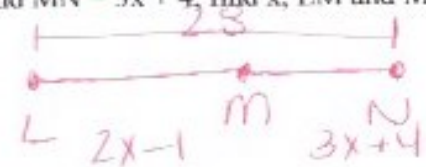
2. Find LM if MN = 7 and LN = 16.

LM = 9



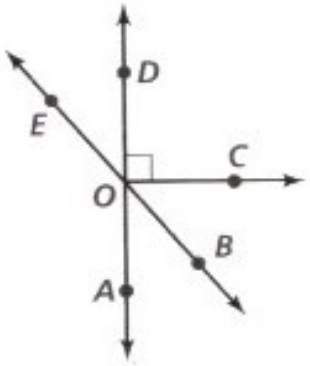
3. If LN = 28, LM = 2x – 1 and MN = 3x + 4, find x, LM and MN.

x = 5
LM = 9
MN = 19



$2x - 1 + 3x + 4 = 28$
$5x + 3 = 28$
$5x = 25$
$x = 5$

Use the diagram at the right to answer questions 4 – 9.



4. Name a pair of vertical angles.

$\angle AOB$ & $\angle EOD$

5. Name a right angle.

$\angle DOC$

6. Name an angle that is supplementary to $\angle DOE$.

$\angle DOB$

7. Name an angle that is complementary to $\angle AOB$.

$\angle BOC$

8. Name a straight angle.

$\angle EOB$