Geometry   Name:
Unit 1 - Quiz 2   Period: Date:
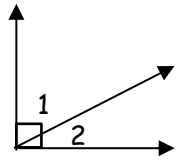
Multiple Choice: Please place the LETTER of the correct answer on the line to left of each problem.
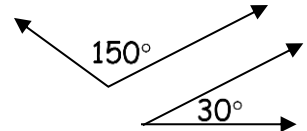
_____1.   Describe the relationship between angles 1 and 2. **Select all that apply**

   A)   vertical angles   B)   complementary angles
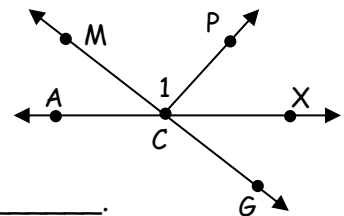   C)   supplementary angles   D)   adjacent angles

_____ 2.   Describe the relationship between the two angles. **Choose all that apply**

   A)   complementary angles   B)   non-adjacent angles
   C)   supplementary angles   D)   adjacent angles

_____ 3.   Which of the following is the correct way to name ∠ 1? **Select all that apply**

   A)   ∠ ACM   B)   ∠ MCP   C)   ∠ PCX
   D)   ∠ ACG   E)   ∠ MCX   F)   ∠ PCM
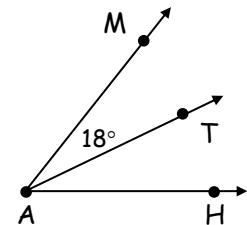
_____4.   An angle that measures more than 90° but less than 180° is a(n) _____.

   A)   acute angle   B)   complementary angle
   C)   right angle   D)   obtuse angle

_____5. $\overrightarrow{AT}$ is an angle bisector. Find m∠ MAH.

   A)   9°   B)   18°
   C)   36°   D)   90°

_____ 6.   If F is in the interior of ∠ DAE, m∠ DAE = 86°, and m∠ FAE = 23°, then find m∠ DAF.

   A)   46°   B)   63°
   C)   109°   D)   172°

_____ 7.   The supplement of 35° is _____.

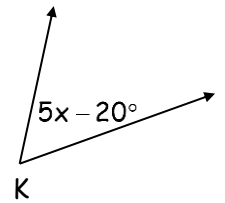   A)   35°   B)   55°
   C)   145°   D)   180°

_____ 8.   Given ∠ J = 4x + 16°. If x = 24, then ∠ J can be classified as what kind of angle.

   A)   Acute   B)   Right
   C)   Obtuse   D)   Straight

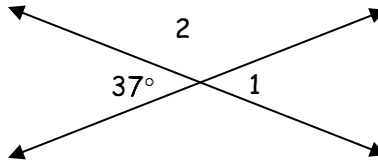_____ 9. What values of x would make ∠K an acute angle? **Choose all the apply**.
   A) $x = 6$ B) $x = 13$
   C) $x = 22$ D) $x = 120$

$5x - 20°$

K

Free Response: Solve the following problems and place your final answer on the line provided.
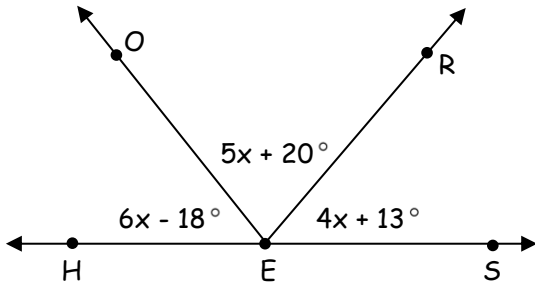   Make sure to <u>show all work</u>.

10.   Find $m∠1$ and $m∠2$.
       (2 pts)

       2

       37°   1

       $m∠1 = $ _____

       $m∠2 = $ _____

11.   Solve for x.
       Find $m∠OES$.

       O

       R

       $5x + 20°$

       $6x - 18°$ $4x + 13°$

       H   E   S

       $x = $ _____

       $m∠OES = $ _____

12. $\overrightarrow{RG}$ is an angle bisector. Find x and $m∠FRO$.

       $m∠FRG = x + 10°$ F
       $m∠GRO = 5x - 7°$

                           G

       $x = $ _____

       R   O
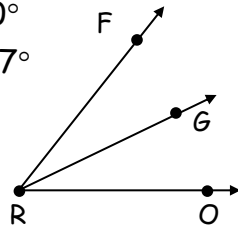
       $m∠FRO = $ _____

13. $\overrightarrow{BD}$ is an angle bisector. Find x.   (2 pts)

       $m∠ABD = 2x + 7°$ A
       $m∠ABC = 10x - 16°$

                           D

       $x = $ _____

       B   C

14.   Solve for x.

       $12x + 15°$ $20x - 9°$

       $x = $ _____