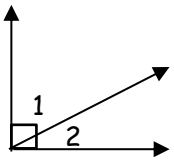
Geometry
Unit 1 - Quiz 2

25

Name:
Period: Date:

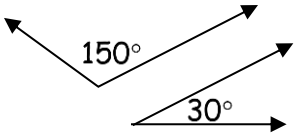
Multiple Choice: Please place the LETTER of the correct answer on the line to left of each problem.

B, D 1. Describe the relationship between angles 1 and 2. **Select all that apply**



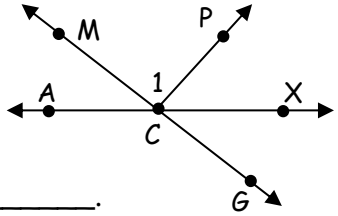
A) vertical angles
B) complementary angles
C) supplementary angles
D) adjacent angles

B, C 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

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

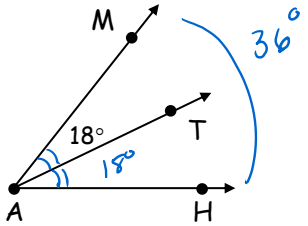


A) ∠ ACM
B) ∠ MCP
C) ∠ PCX
D) ∠ ACG
E) ∠ MCX
F) ∠ PCM

D 4. An angle that measures more than 90° but less than 180° is a(n) _____.

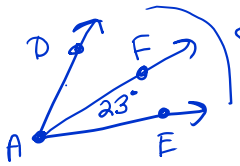
A) acute angle
B) complementary angle
C) right angle
D) obtuse angle

C 5. $\overrightarrow{AT}$ is an angle bisector. Find $m\angle MAH$.



A) 9°
B) 18°
C) 36°
D) 90°

B 6. If F is in the interior of $\angle DAE$, $m\angle DAE = 86°$, and $m\angle FAE = 23°$, then find $m\angle DAF$.



86-23
=63°

A) 46°
B) 63°
C) 109°
D) 172°

C 7. The supplement of 35° is _____.

180-35

A) 35°
B) 55°
C) 145°
D) 180°

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

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

4(24)+16 = 112°

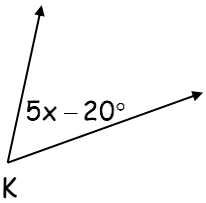
+11

A, B 9. What values of x would make $\angle K$ an acute angle? **Choose all the apply**.

A) $x = 6$ B) $x = 13$ C) $x = 22$ D) $x = 120$

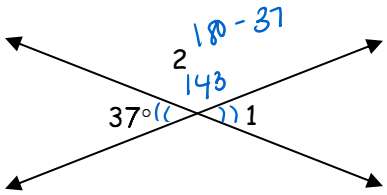
$5x - 20 > 0$ $5x > 20$ $x > 4$

$5x - 20 < 90$ $5x < 110$ $x < 22$ (greater not equal)



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

10. Find $m\angle 1$ and $m\angle 2$. (2 pts)



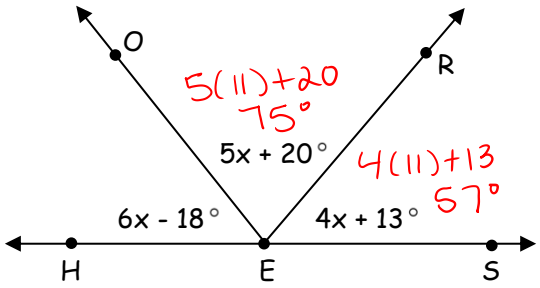
$m\angle 1 =$ 37°

$m\angle 2 =$ 143°

11. Solve for x.

Find $m\angle OES$.

+3



$6x-18+5x+20+4x+13=180$ +1

$15x+15=180$

$15x=165$

$x=11$ +1

$x =$ 11

+1 $m\angle OES =$ 132°

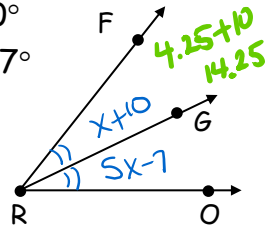
75+57

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

+3

$m\angle FRG = x + 10°$

$m\angle GRO = 5x - 7°$



$x+10=5x-7$

$17=4x$

$x=4.25$

$x =$ 4.25

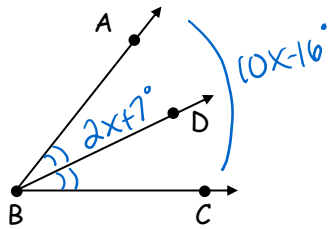
$m\angle FRO =$ 28.5°

2(14.25)

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

$m\angle ABD = 2x + 7°$

$m\angle ABC = 10x - 16°$



$2(2x+7)=10x-16$

$4x+14=10x-16$

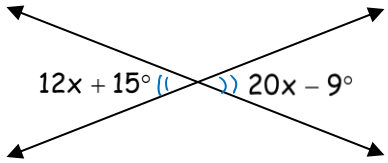
$30=6x$

$x=5$

$x =$ 5

14. Solve for x.

+2



$12x+15=20x-9$ +1

$24=8x$

$x=3$ +1

wrong −1

$12x+15+20x-9=180$

$x=5.4375$

$12x+15+20x-9=90$

$x=2.625$

$x =$ 3

+14