Name: _____ Per: _____

Unit 3 Study Guide: Geometry

1. -14 + -27

2. (18)(-24)

3. -9 – -34

4. 24 ÷ -8

5. Solve for x. $3(x - 6) = 5(x - 2)$

6. B is the midpoint of AC. AB = 4x + 3 and BC = 7x – 15. AC = ?

7. K is between J and L. JL = 7x – 6, JK = x + 7, and KL = 3x – 1. JL = ?

8. Ray AT goes through <PAN. m<PAN = $(25x - 5)^\circ$, m<PAT = $(12x + 10)^\circ$, m<TAN = $(8x + 5)^\circ$. m<PAT = ?

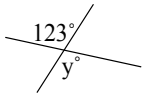
9. Ray OA bisects <BOT. m<BOA = $(2x + 10)^o$ and m<AOT = $(3x - 15)^o$, m<BOT=120 ^{o}. x = ?

10. Ray BC goes through <ABD, m<ABC = 18^o and m<CBD = 74^o. Is <ABD an acute, right, obtuse, or straight angle?

11. How many points do you need to make a line?

12. Determine the measure of x.

13. Determine the measure of y.



14. The two statements below are a conditional statement and its _____.
    If it is November, then it is fall.
    If it is not November, then it is not fall.

15. The two statements below are a biconditional statement and its _____.
    It is cold if and only if it is 45^o F.
    If it is 45^o F, then it is cold.

16. Complete the proof.

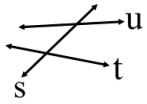
<1 and <2 are supplementary.	Given
m<1 + m<2 = 180 ^{o}	_____

17. Complete the proof.

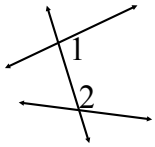
m<3 = m<4	Given
<3 ≅ < 4	_____

Name: _____ Per: _____

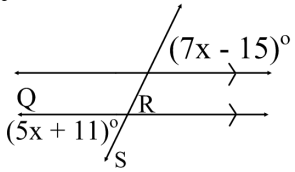
18. Identify the transversal.



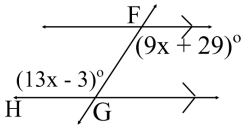
19. <1 & <2 are _____ *(Corresponding, Alternate Interior, Alternate Exterior, Same Side Interior, Vertical)* angles.



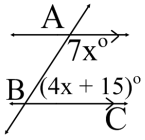
20. m<QRS = ?



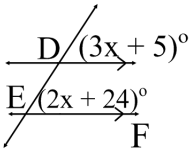
21. m<FGH = ?



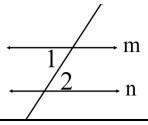
22. m<ABC = ?



23. m<DEF = ?

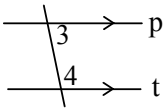


24. Given: $\angle 1 \cong \angle 2$
Prove: $m \| n$



Statements	Reasons
$\angle 1 \cong \angle 2$	Given
$m \| n$	_____

25. Given: $p \| t$
Prove: m<3 + m<4 = 180°



Statements	Reasons
$p \| t$	Given
m<3 + m<4 = 180°	_____