Name: _____ Per: _____

Geometry Unit 1 Study Guide

Simplify.

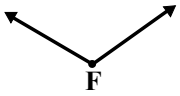
1. 6 - -2
2. 8 ÷ -4
3. (7)(22)
4. -17 + 12

Evaluate.

5. $2x + 1 + 6x + 5 = 9x + 4 + 3x - 10$
6. $x^2 + 6 + x^2 = 3x^2 - 19$

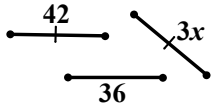
7. Name the ray.

8. Name the angle.

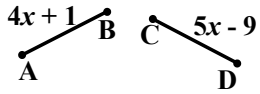


Evaluate

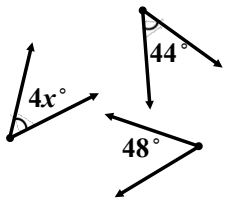
9. x = ?



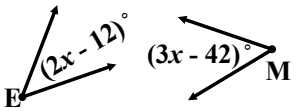
10. $\overline{AB} \cong \overline{CD}$; AB = ?



11. x = ?

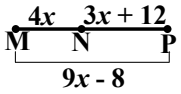


12. $\angle E \cong \angle M$; $m\angle M$ = ?



Evaluate.

13. NP = ?

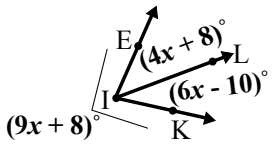


14. M is on $\overline{LN}$. $LM = 5$, $LN = 12$. MN = ?

15. R is between Q and S. $QR = 8x + 7$, $QS = 12x - 3$, and $RS = 2x + 4$. QR = ?

16. T is on $\overline{SV}$. $ST = 9x + 1$, $TV = x + 5$, and $SV = 12x - 4$. ST = ?

17 $m\angle EIK$ = ?



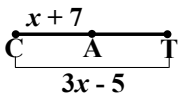
18. $\overrightarrow{BC}$ goes through $\angle ABD$. $m\angle ABC = 42°$ and $m\angle CBD = 31°$. $m\angle ABD$ = ?

19. $\overrightarrow{LN}$ goes through $\angle KLM$. $m\angle KLN = (6x - 4)°$, $m\angle KLM = (10x - 4)°$ and $m\angle NLM = (3x + 12)°$. $m\angle KLM$ = ?

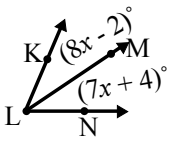
20. Q is the midpoint of $\overline{PR}$. $PQ = 10x$ and $QR = 8x + 4$. PR = ?

21. D is the midpoint of $\overline{CE}$. $CE = 12x - 8$ and $CD = 4x + 4$. CD = ?

22. A is the midpoint of the segment. AT = ?



23. $\overrightarrow{LM}$ bisects $\angle KLN$. $m\angle KLN$ = ?



24. $\overrightarrow{ST}$ bisects $\angle RSV$. $m\angle RST = (3x + 1)°$ and $m\angle TSV = (5x - 17)°$. $m\angle RST$ = ?

25. $\overrightarrow{OM}$ bisects $\angle DOE$. $m\angle DOM = (3x + 7)°$ and $m\angle DOE = (8x - 2)°$. $m\angle MOE$ = ?