

Units 4 & 7 Study Guide: Geometry

Simplify.

1. $19 + -17$

2. $(16)(23)$

3. $-5 - 31$

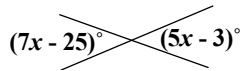
4. $-56 \div 8$

Evaluate.

5. L is between K and M. $KM = 4x - 7$, $LM = x + 1$, and $KL = 2x + 3$. $KM = ?$

6. \overrightarrow{AB} bisects $\angle TAU$. $m\angle TAB = 3x + 7$ and $m\angle BAU = 5x - 13$. $m\angle TAU$.

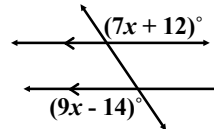
7. $x = ?$



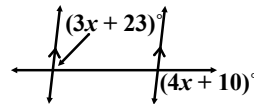
8. $x = ?$

$(5x + 4)^\circ / (3x + 8)^\circ$

9. $x = ?$



10. $x = ?$



For problems 11 & 12, fill in the blanks on the proof shown below.

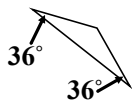
Given: B is the midpoint of AC . $AB = 2x + 4$ and $BC = 3x - 5$.

Prove: $AB = 40$

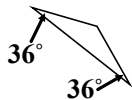
Statements	Reasons
B is the midpoint of AC . $AB = 2x + 4$ and $BC = 3x - 5$.	Given
$AB \cong BC$	11. _____
$AB = BC$	12. _____
$2x + 4 = 3x - 5$	Substitution
$4 = x - 5$	Subt. Prop. of Equality
$9 = x$	Add. Prop. of Equality
$AB = 2(9) + 4$	Substitution
$AB = 40$	Simplify

Evaluate.

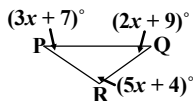
13. Classify the triangle by its angles.



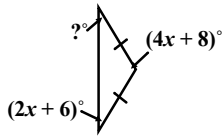
14. Classify the triangle by its sides.



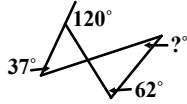
15. Determine $m\angle P$.



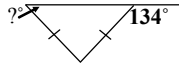
16.



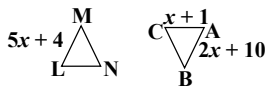
17.



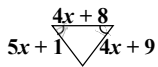
18.



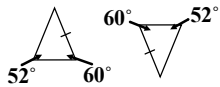
19. $\triangle LMN \cong \triangle ABC$. $AB = ?$



20. $x = ?$



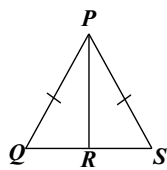
21. The triangles below are congruent by what property?



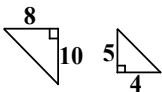
22. The triangles below are congruent by what property?



23. If R is the midpoint of segment QS , then the triangles are congruent by what property?



24. The triangles below are similar by what property?



25. The triangles below are similar by what property?

