

Name _____

MP1 Quarterly Review

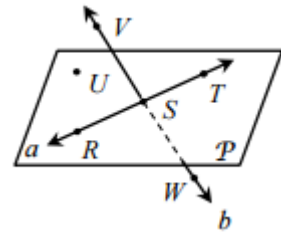
Date _____ Period _____

Regular Geometry

Topic 1: Geometry Basics

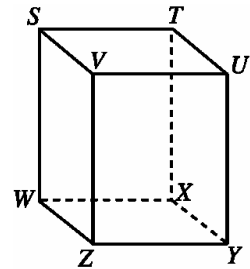
1. Use the diagram to the right to answer the questions below.

- a. Name a point collinear to points S and T. _____
- b. Give another name for line b . _____
- c. Name a point non-coplanar to points R, T, and U. _____



2. Use the diagram to the right to answer the questions below.

- a. Name the intersection of planes $WXYZ$ and $TUXY$. _____
- b. Name a point coplanar to points T, W, and X. _____
- c. Are points S, Z, and U coplanar? Explain _____



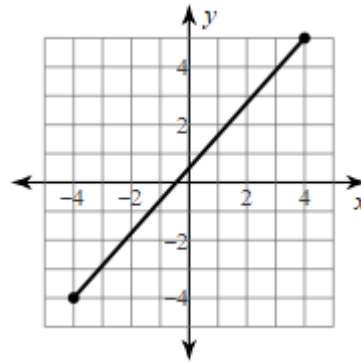
Distance Formula:

Midpoint Formula:

Use the midpoint and distance formulas for questions 3-4.

3. Find the length of \overline{AB} , given $A(-1, 7)$ and $B(11, -1)$.

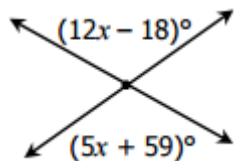
4. Find the midpoint of the given segment.



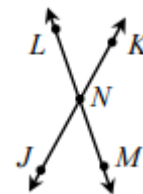
5. $M(2, -7)$ is the midpoint of \overline{RS} . The coordinates of S are $(8, -5)$. What are the coordinates of R?

6. If X is the midpoint of \overline{WY} , $WX = 3x - 1$ and $WY = 10x - 26$, find XY.

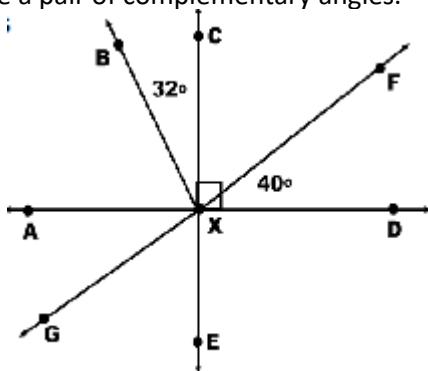
7. Find the value of x .



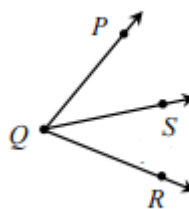
8. If $m\angle LNK = (5x - 27)^\circ$ and $m\angle KNM = (10x - 3)^\circ$, find $m\angle JNM$.



9. Name a pair of vertical angles using the diagram below. Name a pair of complementary angles.



10. If \overline{QS} bisects $\angle PQR$, $m\angle PQS = 4x - 25$, $m\angle PQR = 6x - 18$. Find $m\angle SQR$.



Topic 2: Proofs

Write the letter of the property, definition, or postulate that justifies each statement.

**Not all choices will be used, and some may be used more than once.

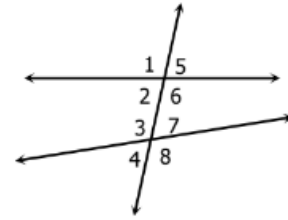
11. If $\angle ABC \cong \angle CBD$, then $\angle CBD \cong \angle ABC$ _____
12. If $VW + WY = ZY$, and $VW + WY = XZ$, then $XZ = ZY$ _____
13. If S is between R and T, then $RS + ST = RT$ _____
14. If $JK + KL = MN + KL$, then $JK = MN$ _____
15. If $m\angle A = m\angle C$, and $m\angle C = m\angle D$, then $m\angle A = m\angle D$ _____
16. If $PQ = QT$, then $PQ + RS = QT + RS$ _____
17. $m\angle DEF = m\angle DEF$ _____
18. If $\frac{1}{2}XZ = XY$, then $XZ = 2XY$ _____
19. If $m\angle LMN = m\angle MNP$, then $\angle LMN \cong \angle MNP$ _____

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| <p>A. Addition Property of Equality</p> <p>B. Subtraction Property of Equality</p> <p>C. Multiplication Property of Equality</p> <p>D. Division Property of Equality</p> <p>E. Substitution Property</p> <p>F. Reflexive Property (of = or \cong)</p> <p>G. Symmetric Property (of = or \cong)</p> <p>H. Transitive Property (of = or \cong)</p> <p>I. Definition of Congruence</p> <p>J. Definition of Midpoint</p> <p>K. Segment Addition Postulate</p> <p>I. Angle Addition Postulate</p> |
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Topic 3: Parallel & Perpendicular Lines

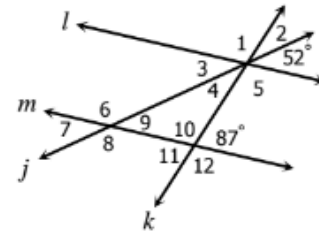
20. Use the diagram to the right to classify each pair of angles.

- a. $\angle 1$ and $\angle 8$ _____
- b. $\angle 6$ and $\angle 7$ _____
- c. $\angle 2$ and $\angle 4$ _____
- d. $\angle 3$ and $\angle 6$ _____

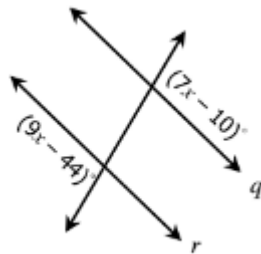


21. If $l \parallel m$, find the measure of each missing angle.

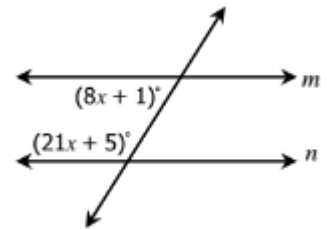
a. $m\angle 1 =$	b. $m\angle 2 =$	c. $m\angle 3 =$
d. $m\angle 4 =$	e. $m\angle 5 =$	f. $m\angle 6 =$
g. $m\angle 7 =$	h. $m\angle 8 =$	i. $m\angle 9 =$
j. $m\angle 10 =$	k. $m\angle 11 =$	l. $m\angle 12 =$



22. If $q \parallel r$, solve for x.

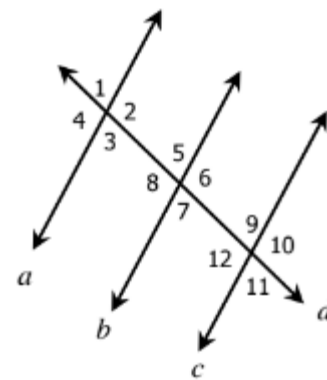


23. If $m \parallel n$, solve for x.



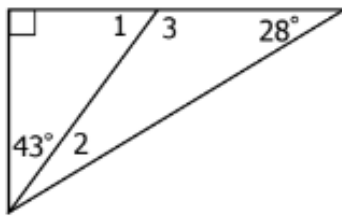
24. Use the diagram to the right to answer the questions below.

- a. If $m\angle 1 = 84$, what must $m\angle 5$ be in order for $a \parallel b$? _____
- b. If $m\angle 2 = 109$, what must $m\angle 9$ be in order for $a \parallel c$? _____
- c. If $m\angle 5 = 68$, what must $m\angle 11$ be in order for $c \parallel b$? _____
- d. If $m\angle 3 = m\angle 9$, what converse proves $a \parallel c$? _____
- e. If $m\angle 8 = m\angle 12$, what converse proves $c \parallel b$? _____
- f. If $m\angle 2 + m\angle 5 = 180$, what converse proves $a \parallel b$? _____



Topic 4: Triangles and Angles

25. Find the measure of each numbered angle.

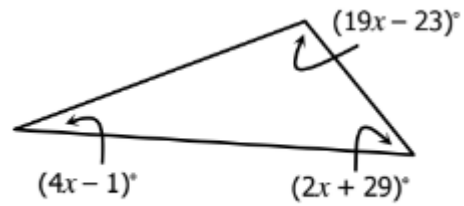


$$m\angle 1 = \underline{\hspace{2cm}}$$

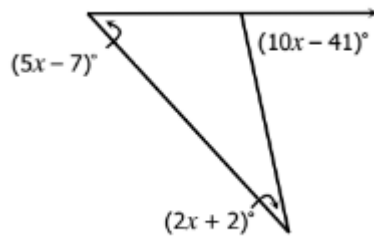
$$m\angle 2 = \underline{\hspace{2cm}}$$

$$m\angle 3 = \underline{\hspace{2cm}}$$

26. Find the value of x .



27. Find the value of x .



28. Find the value of x .

