UNIT 2 TEST REVIEW

∠1 and ∠2 are complementary angles. ∠2 and ∠3 are supplementary angles. Given the measures of ∠1 below, find m∠2 and m∠3.

1. m∠1 = 80°

m∠2 = _____

m∠3 = _____

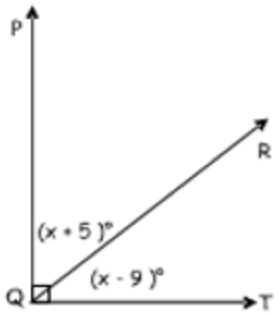
2. m∠1 = 33°

m∠2 = _____

m∠3 = _____

Write an equation to find each value of x. Then, find the measure of each angle.

3.



Relationship: _____

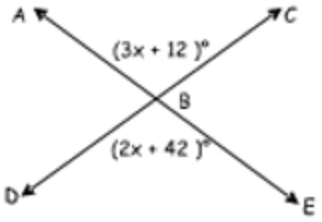
Equation: _____

x = _____

m∠PQR = _____ °

m∠RQT = _____ °

4.



Relationship: _____

Equation: _____

x = _____

m∠ABC = _____ °

m∠ABD = _____ °

Use the transversal to the right to answer questions 5-11.

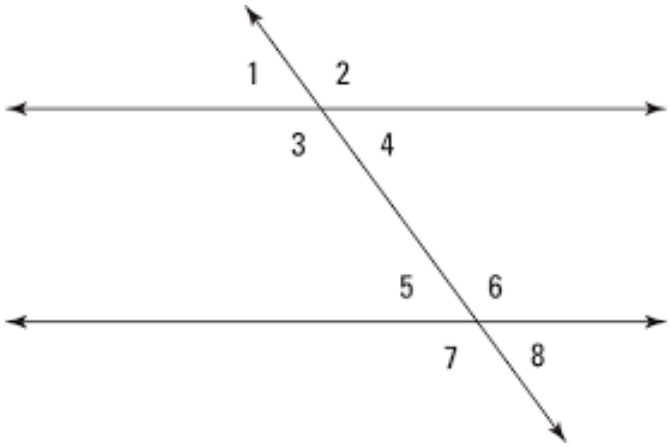
5. ∠ 5 and ∠ _____ are a linear pair

6. ∠ 5 and ∠ _____ are vertical angles

7. ∠ 5 and ∠ _____ are same side interior angles

8. ∠ 5 and ∠ _____ are alternate interior angles

9. ∠ 5 and ∠ _____ are corresponding angles.



10. If m∠5 = 3x + 1 and the m∠4 = 7x - 7. Find x and the m∠5.

Relationship: _____ Equation: _____

x = _____ m∠5 = _____

11. If m∠1 = 3x - 4 and the m∠7 = x + 8. Find x and the m∠7.

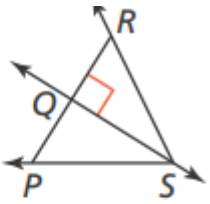
Relationship: _____ Equation: _____

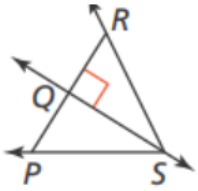
x = _____ m∠7 = _____

Use the picture below to help you solve questions 12-15.

12. If $PS = 36$, $PQ = 3x + 5$, $QR = 6x - 10$, and $RS = 36$, then $PR =$ ■.

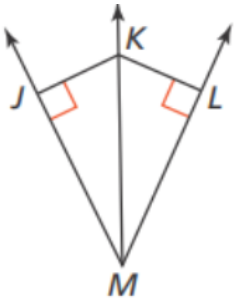
13. If $PS = 4x + 8$, $PQ = 29$, $RS = 5x - 3$, and $QR = 29$, then $PS =$ ■.

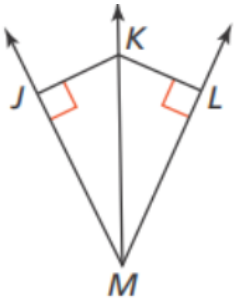




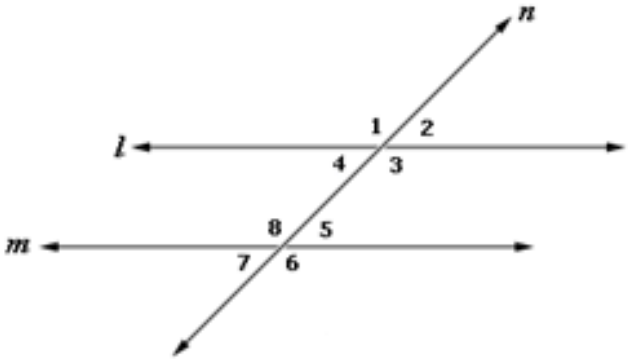
14. If $JM = 12$, $LM = 12$, and $m\angle JMK = 25$, then $m\angle KML =$ ■.

15. If $m\angle JML = 49$, $m\angle JMK = 24.5$, and $JK = 17$, then $KL =$ ■.





Use the transversal image below for questions #13-15. l is parallel to m



_____ 13. If $m\angle 5 = 113°$, what is $m\angle 3$?

a. 180° b. 90° c. 67° d. 113°

_____14. If $m\angle 4 = 42°$, what is $m\angle 7$?

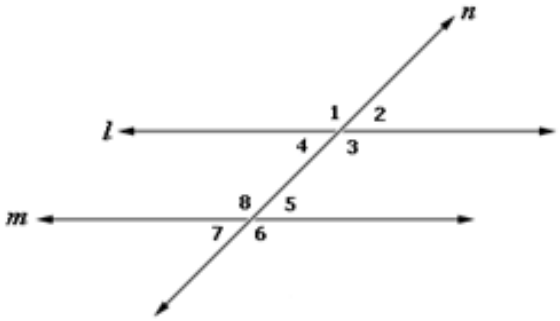
a. 180° b. 90° c. 138° d. 42°

_____ 15. If $m\angle 1 = (4x + 3)°$, and$m\angle 6 = (3x + 35)°$, find the value of x.

a. $x = 5.23$ b. $x = 32$ c. $x = 38$ d. $x = 20.29$

_____ 16. Which of the following answers correctly describe the relationship between angle 3 and angle 8 in the transversal to the right?

a. They form a vertical pair
b. They are alternate exterior angles
c. They are alternate interior angles
d. They are corresponding angles



_____ 17. Angles that have a sum of 90°are _____.

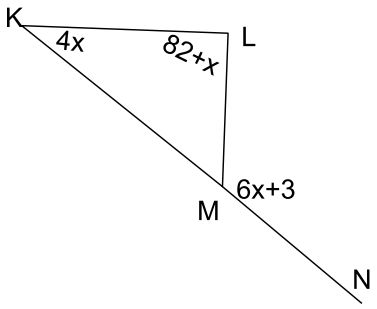
a. Congruent b. Adjacent c. Complementary d. Supplementary

_____ 18. Vertical angles are _____.

a. Congruent b. Adjacent c. Complementary d. Supplementary

_____ 19. Find the value of x in the triangle to the right.

a. 7.18 b. 8.64
c. 7.73 d. 79



_____ 20. Find the value of x in the triangle to the right.

a. 6.6 b. 36.25
c. 29 d. 43