02-01-Sample Quiz-Parallel Lines and Angles

Multiple Choice
Identify the choice that best completes the statement or answers the question.

____ 1. In the diagram line $m$ is parallel to line $n$ with a transversal line $t$.

Which of the below terms best describe the relationship between ∠3 and ∠4?

a. Alternate Exterior Angles
b. Alternate Interior Angles
c. Corresponding Angles
d. Vertical Angles

____ 2. In the diagram line $m$ is parallel to line $n$ with a transversal line $t$.

Which of the below terms best describe the relationship between ∠5 and ∠2?

a. Consecutive Exterior Angles
b. Alternate Exterior Angles
c. Consecutive Interior Angles
d. Alternate Interior Angles
e. Vertical Angles
3. In the diagram line \( m \) is parallel to line \( n \) with a transversal line \( t \).

Which other angle would be the alternate interior angle to \( \angle BEF \)?

a. \( \angle DEG \)
b. \( \angle EBC \)
c. \( \angle ABE \)
d. \( \angle CBH \)

4. Given 2 parallel lines and a transversal that intersects both parallel lines, what must be true about pairs of Corresponding Angles?

In the diagram line \( m \) is parallel to line \( n \) with a transversal line \( t \).

a. The angles must be congruent.
b. The angles must be complementary.
c. The angles must be supplementary.
d. The angles must be obtuse.
5. Given 2 parallel lines and a transversal that intersects both parallel lines, how many pairs of corresponding angles exist in the diagram at the right?

a. 1  
b. 2  
c. 3  
d. 4

6. Use the diagram to determine the measure of angle $m\angle 1$.

a. 40°  
b. 50°  
c. 80°  
d. 130°
7. Use the diagram to determine the measure of angle $m\angle 1$.

\[m\angle 1\]

\[\text{In the diagram line } m \text{ is parallel to line } n \text{ with a transversal line } t \text{ and transversal line } s.\]

a. 50°
b. 85°
c. 95°
d. 100°

8. Use the diagram to determine the measure of the value of $x$.

\[x\]

\[\text{In the diagram line } z \text{ is parallel to line } w \text{ with a transversal line } t.\]

a. $x = 42$
b. $x = 47.5$
c. $x = 55$
d. $x = 60$
9. Use the diagram to determine the measure of the value of $x$.

In the diagram line $m$ is parallel to line $n$ with a transversal line $t$.

a. $x = 5$

b. $x = 13$

c. $x = 20$

d. $x = 23$