## Quiz 3.2: Postulates and Theorems

Multiple Choice: Choose the letter that corresponds to the correct answer. Write the answer in your answer sheet.

- 1. What does the acronym TIAT stand for?
- A. Triangle Interior Angle Theorem
- C. Triangle Interior Alternate Theorem
- B. Triangle Internal Angle Theorem
- D. Triangle Internal Alternate Theorem
- 2. What is the meaning of the acronym PIAT?
  - A. Parallel Internal Angle Theorem
- C. Polygon Internal Angle Theorem
- B. Parallel Interior Angle Theorem
- D. Polygon Interior Angle Theorem
- 3. Statements that are proved from definitions or using operations and facts that were already known are called:
  - A. Axioms
- B. Postulates
- C. Proofs
- D. Theorems
- 4. Which theorem states that the sum of the degree measures of the angles of a triangle is 180°?
  - A. Quadrilateral Interior Angle Theorem
- C. Supplement Theorem

B. Supplement Postulate

- D. Triangle Interior Angle Theorem
- 5. Which of the following theorems states the congruence of vertical angles?
  - A. Complement Theorem

- C. Third Angles Theorem
- B. Right Angles Congruency Theorem
- D. Vertical Angle Theorem
- 6. Which of the following theorems states that any two right angles are congruent?
  - A. Complement Theorem

- C. Third Angles Theorem
- B. Right Angles Congruency Theorem
- D. Vertical Angle Theorem
- 7. "If two angles form a linear pair, then they are supplementary." This is stated in:
  - A. Complement Theorem

C. Supplement Postulate

B. PCAC Postulate

- D. Supplement Theorem
- 8. Provide the reason for this statement: "If  $m \angle J + m \angle K = 90^{\circ}$  and  $m \angle K + m \angle L = 90^{\circ}$ , then  $\angle J \cong \angle L$ ."
  - A. Complement Theorem

C. Supplement Postulate

B. PCAC Postulate

- D. Supplement Theorem
- 9. Provide the reason for this statement: "If  $\angle X$  and  $\angle Y$  are vertical angles, then  $\angle X \cong \angle Y$ ."
  - A. Complement Theorem

- C. Third Angles Theorem
- B. Right Angles Congruency Theorem
- D. Vertical Angle Theorem
- 10. "If  $\angle M$  and  $\angle N$  form a linear pair, then  $\angle M$  and  $\angle N$  are supplementary." This statement is justified by:

  - A. Complement Theorem C. Supplement Postulate
  - B. PCAC Postulate D. Supplement Theorem
- 11. The exterior angle of a triangle can be solved using:
  - A. Exterior Angles Theorem
- C. Supplement Theorem
- B. PAIC Theorem D. Vertical Angle Theorem
- 12. Which of the following theorems may be used to solve the third angle of a triangle?
  - A. Complement Theorem

- C. Third Angles Theorem
- B. Right Angles Congruency Theorem D. Vertical Angle Theorem

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D. Triangle Interior Angle Theorem

D. Theorems

3. Statements that are proved from definitions or using operations and facts that were already known are called:

C. Proofs

- A. Axioms

- 4. Which theorem states that the sum of the degree measures of the angles of a triangle is 180°?
- A. Quadrilateral Interior Angle Theorem C. Supplement Theorem

B. Postulates

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