Quiz 2.6: If-Then Statements

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

1. A statement formed by interchanging the hypothesis and the conclusion is called:

    A. Conditional   B. Contrapositive   C. Converse   D. Inverse

2. A statement formed by negating both the hypothesis and conclusion and also then interchanging these negations is called:

    A. Conditional   B. Contrapositive   C. Converse   D. Inverse

3. A statement formed by joining two statements p (hypothesis) and q (conclusion) using the words *if* and *then* is called:

    A. Conditional   B. Contrapositive   C. Converse   D. Inverse

4. A statement formed by negating the hypothesis and conclusion of the original conditional statement is called:

    A. Conditional   B. Contrapositive   C. Converse   D. Inverse

5. What is the notation form of the converse statement?

    A. $p \to q$ B. $\sim p \to \sim q$ C. $q \to p$ D. $\sim q \to \sim p$

6. Which statement always has the same truth value as the original conditional statement?

    A. If-then statement   B. Contrapositive   C. Converse   D. Inverse

7. How do we write the inverse statement in symbolic terms?

    A. $p \to q$ B. $\sim p \to \sim q$ C. $q \to p$ D. $\sim q \to \sim p$

8. Which of the following is the contrapositive of the statement "Two congruent angles have the same measure"?

    A. If two angles are congruent, they they have the same measure.

    B. If two angles are not congruent, they they do not have the same measure.

    C. If two angles have the same measure, then they are congruent.

    D. If two angles do not have the same measure, then they are not congruent.

9. Which of the following is the inverse of the statement "Two intersecting lines lie in one plane"?

    A. If two lines intersect, then they lie in one plane.

    B. If two lines do not intersect, then they do not lie in one plane.

    C. If two lines lie in one plane, then they intersect.

    D. If two lines do not lie in one plane, they they do not intersect.

10. Which of the following is the converse of the statement "The sum of angles forming a linear pair is 180°"?

    A. If angles form a linear pair, then their sum is 180°.

    B. If angles do not form a linear pair, then their sum is not 180°.

    C. If the sum of angles is 180°, then they form a linear pair.

    D. If the sum of angles is not 180°, then they do not form a linear pair.

1. A statement formed by interchanging the hypothesis and the conclusion is called:

   Solution:

   A. Conditional   B. Contrapositive   C. Converse   D. Inverse

2. A statement formed by negating both the hypothesis and conclusion and also then interchanging these negations is called:

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   A. Conditional   B. Contrapositive   C. Converse   D. Inverse

3. A statement formed by joining two statements p (hypothesis) and q (conclusion) using the words *if* and *then* is called:

   Solution:

   A. Conditional   B. Contrapositive   C. Converse   D. Inverse

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   Solution:

   A. Conditional   B. Contrapositive   C. Converse   D. Inverse

5. What is the notation form of the converse statement?

   Solution:

   A. $p \to q$ B. $\sim p \to \sim q$ C. $q \to p$ D. $\sim q \to \sim p$

6. Which statement always has the same truth value as the original conditional statement?

   Solution:

   A. If-then statement   B. Contrapositive   C. Converse   D. Inverse

7. How do we write the inverse statement in symbolic terms?

   Solution:

   A. $p \to q$ B. $\sim p \to \sim q$ C. $q \to p$ D. $\sim q \to \sim p$

8. Which of the following is the contrapositive of the statement "Two congruent angles have the same measure"?

   Solution:

   A. If two angles are congruent, they they have the same measure.

   B. If two angles are not congruent, they they do not have the same measure.

   C. If two angles have the same measure, then they are congruent.

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   Solution:

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    B. If angles do not form a linear pair, then their sum is not 180°.

    C. If the sum of angles is 180°, then they form a linear pair.

    D. If the sum of angles is not 180°, then they do not form a linear pair.