## **Quiz 2.7: Logical Equivalence of Statements**

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

1.	The process of observtions is called:	generalizations from observa-	1. The			
	A. Deductive reasoning		C. Inductive reasoning		A. D	
	B. Detachment		D. Syllogism		B. D	
2.	The type of reasoning which makes use of accepted rules of logic and general statements to arrive at a conclusion is called:				2. The arriv	
A. Deductive reasoning B. Detachment		ng	C. Inductive reasoning		A. D	
			D. Syllogism		B. D	
3.	Any example that shows a statement is false		is called:		3. Any	
	A. Contra-example	B. Counterexample	C. False example	D. Inverse example	A. C	
4.	The conclusion drawn from observations, examples and pattern is called:					
	A. Conjecture	B. Detachment	C. Hypothesis	D. Syllogism	A. C	
5.	5. Which of the following statements is false when the original conditional statement is fals					
	A. Conditional	B. Contrapositive	C. Converse	D. If-then statement	A. C	
6.	Which of the followin	g arguments employs o	deductive reasoning?		6. Whic	
	A. S, M, T, W, T,, S. The letter in the blank must be F.					
	B. 5,10,15, 20. The next number is 25.					
	C. J, F, M, A, M,, J. The letter in the blank must be J.					
	D. All piano players are musicians. Fred is a piano player. Therefore, Fred is a musician.					
7.	Which of the following statements is logically equivalent to the inverse statement?					
	A. Conditional	B. Contrapositive	C. Converse	D. If-then statement	A. C	
8.	Use inductive reasons	ing to find the next two	terms of the sequence	e 1, 3, 9, 27,,	8. Use	
	A. 36, 45	B. 36, 63	C. 54, 108	D. 81, 243	A. 36	
9.	Supply the conclusion for the given hypothesis: If $\angle 1 \cong \angle 2$ , then					
	A. $\angle 1$ and $\angle 2$ are complementary.		C. $\angle 1$ and $\angle 2$ form a linear pair.		A. ∠	
	B. $\angle 1$ and $\angle 2$ are sup	plementary.	D. $\angle 1$ and $\angle 2$ have t	he same measure.	В. ∠	
10.	Major Premise: If you Minor Premise: Aaron	Complete the following syllogism:  Major Premise: If you are a good citizen, then you obey traffic rules.  Minor Premise: Aaron is a good citizen.  Conclusion: Therefore,				
	A. Aaron is a Filipino		C. Aaron obeys traf	fic rules.	A. A.	
	B Aaron has a car		D. Aaron pays his t	aves	l BA	

## **Quiz 2.7: Logical Equivalence of Statements**

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

1.	<ol> <li>The process of observing data, recognizing patterns, and making generalizations from obsertions is called:</li> </ol>						
	A. Deductive reasoning		C. Inductive reasoning				
	B. Detachment		D. Syllogism				
2.	2. The type of reasoning which makes use of accepted rules of logic and general starrive at a conclusion is called:						
	A. Deductive reasoning B. Detachment		C. Inductive reasoning D. Syllogism				
3.	3. Any example that shows a statement is false is called:						
	A. Contra-example	B. Counterexample	C. False example	D. Inverse example			
4.	The conclusion drawn from observations, examples and pattern is called:						
	A. Conjecture	B. Detachment	C. Hypothesis	D. Syllogism			
5.	Which of the following statements is false when the original conditional statement is false?						
	A. Conditional	B. Contrapositive	C. Converse	D. If-then statement			
6.	. Which of the following arguments employs deductive reasoning?						
	A. S, M, T, W, T,, S. The letter in the blank must be F.						
	B. 5,10,15, 20. The next number is 25.						
	C. J, F, M, A, M, $\_$ , J. The letter in the blank must be J.						
	D. All piano players are musicians. Fred is a piano player. Therefore, Fred is a musician.						
7.	Which of the following	the following statements is logically equivalent to the inverse statement?					
	A. Conditional	B. Contrapositive	C. Converse	D. If-then statement			
8.	Use inductive reasoning to find the next two terms of the sequence 1, 3, 9, 27,,						
	A. 36, 45	B. 36, 63	C. 54, 108	D. 81, 243			
9.	Supply the conclusion for the given hypothesis: If $\angle 1 \cong \angle 2$ , then						
	<ul><li>A. ∠1 and ∠2 are complementary.</li><li>B. ∠1 and ∠2 are supplementary.</li></ul>		C. $\angle 1$ and $\angle 2$ form a linear pair.				
			D. $\angle 1$ and $\angle 2$ have the same measure.				
10.	Complete the following syllogism: Major Premise: If you are a good citizen, then you obey traffic rules. Minor Premise: Aaron is a good citizen. Conclusion: Therefore,						
	A. Aaron is a Filipino.		C. Aaron obeys traffic rules.				
	B. Aaron has a car.	B. Aaron has a car. D. Aaron pays his taxes.					