

NAME: \_\_\_\_\_

1. 010415a, P.I. G.G.26  
Which statement is the converse of "If the sum of two angles is  $180^\circ$ , then the angles are supplementary"?  
[A] If the sum of two angles is not  $180^\circ$ , then the angles are not supplementary.  
[B] If the sum of two angles is not  $180^\circ$ , then the angles are supplementary.  
[C] If two angles are supplementary, then their sum is  $180^\circ$ .  
[D] If two angles are not supplementary, then their sum is not  $180^\circ$ .
2. 080813a, P.I. G.G.26  
What is the converse of the statement "If  $a^2 + b^2 = c^2$ , then  $\triangle ABC$  is a right triangle"?  
[A] If  $\triangle ABC$  is not a right triangle, then  $a^2 + b^2 = c^2$ .  
[B] If  $a^2 + b^2 = c^2$ , then  $\triangle ABC$  is not a right triangle.  
[C]  $a^2 + b^2 = c^2$  if, and only if,  $\triangle ABC$  is a right triangle.  
[D] If  $\triangle ABC$  is a right triangle, then  $a^2 + b^2 = c^2$ .
3. 080014a, P.I. G.G.26  
What is the converse of the statement "If it is sunny, I will go swimming"?  
[A] If it is not sunny, I will not go swimming.  
[B] If I go swimming, it is sunny.  
[C] I will go swimming if and only if it is sunny.  
[D] If I do not go swimming, then it is not sunny.
4. 080116a, P.I. G.G.26  
Which statement is the converse of "If it is a 300 ZX, then it is a car"?  
[A] If it is a car, then it is not a 300 ZX.  
[B] If it is a car, then it is a 300 ZX.  
[C] If it is not a car, then it is not a 300 ZX.  
[D] If it is not a 300 ZX, then it is not a car.
5. 060816a, P.I. G.G.26  
What is the converse of the statement "If  $x$  is an even integer, then  $(x + 1)$  is an odd integer"?  
[A] If  $(x + 1)$  is not an odd integer, then  $x$  is not an even integer.  
[B]  $x$  is not an even integer if and only if  $(x + 1)$  is not an odd integer.  
[C] If  $(x + 1)$  is an odd integer, then  $x$  is an even integer.  
[D]  $x$  is an even integer if and only if  $(x + 1)$  is an odd integer.
6. 060520a, P.I. G.G.26  
What is the converse of the statement "If it is Sunday, then I do not go to school"?  
[A] If I do not go to school, then it is Sunday.  
[B] If it is not Sunday, then I go to school.  
[C] If I go to school, then it is not Sunday.  
[D] If it is not Sunday, then I do not go to school.

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7. 080521a, P.I. G.G.26

What is the converse of the statement "If Alicia goes to Albany, then Ben goes to Buffalo"?

- [A] Alicia goes to Albany if and only if Ben goes to Buffalo.
- [B] If Ben goes to Buffalo, then Alicia goes to Albany.
- [C] If Alicia does not go to Albany, then Ben does not go to Buffalo.
- [D] If Ben does not go to Buffalo, then Alicia does not go to Albany.

8. 060717a, P.I. G.G.26

What is the converse of the statement "If the Sun rises in the east, then it sets in the west"?

- [A] If the Sun rises in the west, then it sets in the east.
- [B] If the Sun does not rise in the east, then it does not set in the west.
- [C] If the Sun sets in the west, then it rises in the east.
- [D] If the Sun does not set in the west, then it does not rise in the east.

9. 089912a, P.I. G.G.26

What is true about the statement "If two angles are right angles, the angles have equal measure" and its converse "If two angles have equal measure then the two angles are right angles"?

- [A] Both the statement and its converse are false.
- [B] The statement is true but its converse is false.
- [C] The statement is false but its converse is true.
- [D] Both the statement and its converse are true.

10. 080205a, P.I. G.G.26

Given the statement: "If two lines are cut by a transversal so that the corresponding angles are congruent, then the lines are parallel." What is true about the statement and its converse?

- [A] The statement is false, but its converse is true.
- [B] The statement is true, but its converse is false.
- [C] The statement and its converse are both true.
- [D] The statement and its converse are both false.

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11. 010112a, P.I. G.G.26

Given the statement: "If two sides of a triangle are congruent, then the angles opposite these sides are congruent."

Given the converse of the statement: "If two angles of a triangle are congruent, then the sides opposite these angles are congruent." What is true about this statement and its converse?

- [A] The statement is true but its converse is false.
- [B] The statement is false but its converse is true.
- [C] Neither the statement nor its converse is true.
- [D] Both the statement and its converse are true.

12. 060730a, P.I. G.G.26

Given the statement: "A right angle measures  $90^\circ$ ." How is this statement written as a biconditional?

- [A] If an angle is a right angle, then it measures  $90^\circ$ .
- [B] An angle measures  $90^\circ$  and it is a right angle.
- [C] If an angle does not measure  $90^\circ$ , then it is not a right angle.
- [D] An angle is a right angle if, and only if, it measures  $90^\circ$ .

13. 010627a, P.I. G.G.26

Which statement is expressed as a biconditional?

- [A] Two angles are congruent if and only if they have the same measure.
- [B] Two angles are congruent if they have the same measure.
- [C] If two angles are both right angles, then they are congruent.
- [D] If two angles are congruent, then they are both right angles.

14. 010923a, P.I. G.G.26

Which statement is an example of a biconditional statement?

- [A] Craig has money and he buys a car.
- [B] If Craig has money, he buys a car.
- [C] Craig buys a car if and only if he has money.
- [D] Craig has money or he buys a car.

- [1]   C
- [2]   D
- [3]   B
- [4]   B
- [5]   C
- [6]   A
- [7]   B
- [8]   C
- [9]   B
- [10]  C
- [11]  D
- [12]  D
- [13]  A
- [14]  C