Geometry Practice: G.G.25 #2
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NAME:_____

P.I. G.G.25: Know and apply the conditions under which a compound statement (conjuction, disjunction, conditional, biconditional) is true

1. Select the conclusion which will make the following argument valid.

   If you work hard, then you will find a position. If you find a position, then you will be happy.

   [A] If you are not happy, then you did not find a position.

   [B] If you work hard, then you will be happy.

   [C] If you do not work hard, then you will not be happy.

   [D] If you are happy, then you worked hard.

2. Select the conclusion which will make the following argument valid.

   If you graduate, then you will get a good job. If you get a good job, then you will be satisfied.

   [A] If you are satisfied, then you graduated.

   [B] If you graduate, then you will be satisfied.

   [C] If you are not satisfied, then you did not get a good job.

   [D] If you do not graduate, then you will not be satisfied.

3. Select the conclusion which will make the following argument valid.

   If you graduate, then you will find a position. If you find a position, then you will be well paid.

   [A] If you do not graduate, then you will not be well paid.

   [B] If you are well paid, then you graduated.

   [C] If you are not well paid, then you did not find a position.

   [D] If you graduate, then you will be well paid.

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4. If the hypothesis of a conditional statement is false, then the statement is considered to be true no matter whether the conclusion is true or false. Find the values of *x* for which "If $7 \times 6 = 13$, then $x - 3 = 7$" is true if *x* is an integer.

   [A] all integers [B] no integers

   [C] all integers except 10 [D] 10

5. Assume the statements are true: "If it doesn't rain, we play the game. It doesn't rain." The conclusion is _____.

   [A] we do not play the game

   [B] we play the game

   [C] we wait for rain

   [D] we may or may not play

6. Find a conclusion that will make the argument valid.

   If I drive to work, then I will not be late. If I am not late, then I do not lose any pay.

7. Find a conclusion that will make the argument valid.

   I will go to college or to trade school. I will not go to trade school.

8. Find a conclusion that will make the argument valid.

   If the electricity is off, the computer will not work. The electricity is off.

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[1] B

[2] B

[3] D

[4] A

[5] B

[6] If I drive to work, then I will not lose any pay.

[7] I will go to college.

[8] The computer will not work.