PreAP Geometry Name_____
Evaluate 2.2 Conditional Statements Date _____ Period _____

For #1 and #2, rewrite the statements in if-then form:

1. Only people who are registered are allowed to vote.

2. Points that lie on the same line are collinear.

For #3 and #4, write the converse, inverse and contrapositive of the statements. Determine each statement's truth value (true or false)

3. If points are coplanar, then they lie in the same plane.

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4. If a dog is a Chihuahua, then the dog is small.

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For #5 and #6, indicate the truth value of each statement (true or false). If false, provide a counterexample (justify your answer).

5. If $x^2 = 36$, then x must equal 9.

6. If $m\angle A = 122^\circ$, then the measure of the supplement of $\angle A$ is 58°.

7. Write a conditional statement that is true but the converse is false.

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8. Write a conditional statement that is true with a converse that also is true.

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For #9 and #10, write the converse of each true statement. If the converse is also true, then write a bi-conditional statement.

9. If points lie on the same line, then they are collinear.

10. If two angles are supplementary, then their sum is 180°.

For #11 rewrite the bi-conditional statement as a conditional statement and its converse:

11. Two lines are perpendicular if and only if they intersect to form right angles.

For #12, write the inverse of the statement. Then indicate whether the statement is true or false.

12. All birds have feathers.