

Name: _____

Date: _____

Logic Statements

- Determine the contrapositive of the statement: if p , then q .
 - If $\neg q$, then $\neg p$
 - If p , then $\neg q$
 - If $\neg p$, then q
 - If q , then p
- Determine the inverse of the statement: if p , then q .
 - If $\neg q$, then p
 - If p , then $\neg q$
 - If $\neg p$, then q
 - If $\neg p$, then $\neg q$
- Determine the converse of the statement if p , then q .
 - If $\neg q$, then p
 - If p , then $\neg q$
 - If $\neg p$, then q
 - If q , then p
- Given the statement: "If a triangle is a right triangle, then it has a 90 degree angle," is the following its converse, inverse, or contrapositive?

"If a triangle is not a right triangle, then it does not have a 90 degree angle."

 - converse
 - inverse
 - contrapositive
- Given the statement: "If a conditional statement is false, then its contrapositive is false," is the following statement its converse, inverse, or contrapositive?

"If the contrapositive of a conditional statement is true, then the conditional statement is true."

 - converse
 - inverse
 - contrapositive
- Given the statement: "If you eat all your vegetables, then you will grow," which of the following choices is its inverse?
 - If you grow, then you will eat all of your vegetables.
 - If you do not grow, then you will not eat all of your vegetables.
 - If you do not eat all of your vegetables, then you will not grow.