

9-18-13

5<sup>th</sup> Geo

Converse

Inverse

Contrapositive

If you live in Radford,  
then you live in Virginia.

Converse (flip)  
If you live in VA, then  
you live in Radford.

Inverse (negate each)  
If you don't live in Radford,  
then you don't live in VA.

Contrapositive (flip and negate)  
If you don't live in VA, then  
you don't live in Radford.  
**TRUE.**

If you like me, then you  
get an A.

Converse: If you get an A, then  
you like me.

Inverse: If you don't like me,  
then you don't get an A.

Contrapositive: If you don't get  
an A, then you don't like  
me.

Change to an if, then statement

① All boys are silly.

If you are a boy, then  
you are silly.

② All toys use electricity

If it is a toy, then  
it uses electricity.

③ White walls are hard to clean

If it is a white wall, then  
it is hard to clean.

If  $2x = 8$ , then  $x = 4$ .

Converse: If  $x = 4$ , then  $2x = 8$ .

Inverse: If  $2x \neq 8$ , then  
 $x \neq 4$ .

9-18-13

6<sup>th</sup> 6<sup>th</sup>

Converse

Inverse

Contrapositive

If you live in VA, then  
you live in the U.S.A.

Converse: If you live in the U.S.A,  
then you live in VA.

Inverse: (Negate the Statement)

If you don't live in VA,  
then you don't live in the U.S.A.

Contrapositive:

If you don't live in the U.S.A,  
then you don't live in VA.

If you are old, then you  
are ugly.

Converse: If you are ugly,  
then you are old.

Inverse: If you are not old,  
then you are not ugly.

Contrapositive: If you are not  
ugly, then you are not old.

Change to an if, then statement

① Boys are studmisters.

If you are a boy, then you  
are a studmister.

② Runners are fast.

If you are a runner, then  
you are fast.

③ Baseball bats hit baseballs.

If it is a baseball bat, then  
it hits baseballs.

Give the converse and inverse  
of

"If  $5x = 10$ , then  $x = 2$ ".

Converse: If  $x = 2$ , then  $5x = 10$ .

Inverse: If  $5x \neq 10$ , then  $x \neq 2$ .