## Mathelpers

## Name:

## Inverse, Converse, and Contra Positives

Exercise 1: Write the converse, inverse and contra positive statements of each of following true conditional statements:

1) An angle that measures $120^{\circ}$ is obtuse.
2) A triangle is isosceles if it has at least two sides with the same length
3) An angle is a right angle when it has a degree measure of $90^{\circ}$.

Exercise 2: Write the given sentences as conditional statements then find their converses, inverses, and contra positives. Assuming the conditional statements are true, determine whether each of the converse, inverse, and contra positive statements is true or false. Give an explanation for each false statement.

1) Parallel lines do not intersect
2) A square is a rectangle
3) A square is not a triangle
4) Where there is smoke there is fire
5) All integers are real number
