

## Lesson 2.2 Worksheet

Name: \_\_\_\_\_

**Rewrite the conditional statement in if-then form.**

- 1.) When  $x = 6$ ,  $x^2 = 36$
- 2.) The measure of a right angle is  $90^\circ$
- 3.) Only people who are registered are allowed to vote.

**For exercises 4-8, write each given statement in if-then form, then write its converse and inverse.**

- 4.) *Complementary angles add to  $90^\circ$*

If-then:

Converse:

Inverse:

- 5.) *Ants are insects.*

If-then:

Converse:

Inverse:

- 6.)  $3x + 10 = 16$ , because  $x = 2$ .

If-then:

Converse:

Inverse:

- 7.) *A midpoint bisects a segment.*

If-then:

Converse:

Inverse:

**Decide whether the statement is true or false. If it is false, then provide a counter example.**

8.) If a polygon has five sides, then it is a regular pentagon.

9.) If  $m\angle A$  is  $85^\circ$ , then the measure of the complement of  $\angle A$  is  $5^\circ$ .

10.) Supplementary angles are always linear pairs.

**Write the following statements as a *biconditional statement*.**

11.) An angle with a measure between  $90^\circ$  and  $180^\circ$  is called *obtuse*.

12.) Two angles are a *linear pair* if they are adjacent angles whose non-common sides are opposite rays.