Name _____ Date_____ Period_____

Classwork 2-1 Conditional Statements

Underline the hypothesis, and circle the conclusion of each conditional statement.

1. If the anchor gets loose, then the boat will drift.

2. If you study hard, then you will make a good grade on the test.

3. If $3x-10=23$, then $x=11$.

Write each statement in if-then form.

4. All music lovers buy cds.

5. An obtuse angle has a measure greater than $90°$.

Write the converse, inverse, and contrapositive of each conditional statement.

6. If it is Saturday, then school is closed.

Converse:_____.

Inverse:_____.

Contrapositive:_____.

7. If two angles are adjacent, then they have a common vertex.

Converse:_____.

Inverse:_____.

Contrapositive:_____.

Name _____ Date_____ Period_____

Classwork 2-1 Conditional Statements

Let p represent "Math is fun", and let q represent "Math is difficult.

Translate the following into symbolic form.

8. Math is not fun. _____

9. Math is fun or math is difficult. _____

10. Math is not fun and math is difficult. _____

Translate the following from symbolic form to written form.

11. $p \wedge \sim q$

_____.

12. $\sim q \vee p$

_____.

Write the converse of each of the following conditional statements, and then write the biconditional.

13. If an angle is acute, then its measure is less than $90°$.

converse:_____.

biconditional:_____.

14. If the measure of an angle is $180°$, then it is a straight angle.

converse:_____.

biconditional:_____.