<ul><li>Directions: Identify the hypothesis and conclusion of each</li><li>1) If you can see the sun, then it is daytime.</li></ul>	h <b>conditional.</b> 2) If a figure has 8 sides, then it is an octagon.
Hypothesis:	Hypothesis:
Conclusion:	Conclusion:
3) If two angles form a linear pair, then the angles are supplementary.	4) If x + 3 = 8, then 8 = x + 3.
Hypothesis:	Hypothesis:
Conclusion:	Conclusion:
<b>Directions: Write a conditional statement.</b> 5) Congruent angles have equal measures.	6) On Wednesday, soccer practice is at 5:00.
7) Alternate exterior angles are congruent when two lines are parallel and cut by a transversal.	8) Two perpendicular lines form four right angles.
<b>Directions: Show that the conditional statement is false b</b> 9) If a number is divisible by 5, then it is odd.	<b>by finding a counterexample.</b> 10) If an animal is an insect, then it is a fly.
11) If x > 3, then x > 5.	12) If ∠A & ∠B are supplementary, then m∠A = 120° & m∠B = 60°.
13) If $x^2 = 49$ , then x = 7.	<ol> <li>If two lines are   , cut by a transversal, then the same side interior angles are ≠.</li> </ol>

15) An isosceles triangle has at least  $2 \cong$  sides.

16) Adjacent  $\angle$ 's are 2  $\angle$ 's that share a side.

## Directions: Write the converse, inverse, and contrapositive. Then find the truth value for each statement. If appropriate, then write the biconditional statement.

- 17) If an angle is  $90^{\circ}$ , then it is a right angle.
- T F Converse:
- T F Inverse:
- T F Contrapositive:
- T F Biconditional:
- 18) If two angles are right angles, then the angles are congruent.
- T F Converse:
- T F Inverse:
- T F Contrapositive:
- T F Biconditional:
- 19) If two lines are perpendicular, then they form right angles.
- T F Converse:
- T F Inverse:
- T F Contrapositive:
- T F Biconditional:
- 20) If a figure is a rectangle, then it has 4 sides.
- T F Converse:
- T F Inverse:
- T F Contrapositive:
- T F Biconditional: