Directions: Identify the hypothesis and conclusion of each conditional.

If you can see the sun, then it is daytime.

Hypothesis: You can See the Sun.

Conclusion: It is daytime.

3) If two angles form a linear pair, then the angles are supplementary.

Hypothesis: 2 L's form a lin pr

Conclusion: The L'S are SUPP.

2) If a figure has 8 sides, then it is an octagon.

Hypothesis: A figure has 8 sides.

Conclusion: It is an octagon.

4) If x + 3 = 8, then 8 = x + 3.

Hypothesis: x + 3 = 8

Conclusion: 8 = x + 3

Directions: Write a conditional statement.

 Congruent angles have equal measures. If 2 L's are 2, then the LIS have equal measures.

7) Alternate exterior angles are congruent when two lines are parallel and cut by a transversal.

If 2 alt. ext. L's are ?, then 2 lines are 11.

6) On Wednesday, soccer practice is at 5:00. If it is wednesday, then soccer practice is at 5:00.

8) Two perpendicular lines form four right angles. If 2 lines are I, then the lines form 4

right LIS.

Directions: Show that the conditional statement is false by finding a counterexample.

9) If a number is divisible by 5, then it is odd.

10 is divisible by 5 but it is even.

11) If x > 3, then x > 5.

x could be 4 which is greater than 3 but not greater than 5. 13) If x2 = 49, then x = 7.

x could equal -7 because (-7)2=49

10) If an animal is an insect, then it is a fly.

An ount is an insect, but it is not a fly.

12) If ∠A & ∠B are supplementary, then $m\angle A = 120^{\circ} \& m\angle B = 60^{\circ}$.

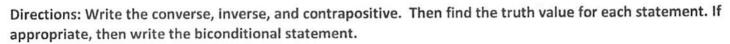
The mid could equal 100° E the MLB could equal 80.
Then they are Still Supplementary.

14) If two lines are II, cut by a transversal, then the

same side interior angles are \(\neq \).

The same side interior L's could both be 900 which would make them = Directions: Write the definition as a biconditional.

- 15) An isosceles triangle has at least $2 \cong$ sides. A Disisosceles iff it has at least 2 = sides.
- 16) Adjacent ∠'s are 2 ∠'s that share a side. 2 L's are adjacent iff the 2 L's share a side.



- 17) If an angle is 90°, then it is a right angle.
- Converse: If an Lisaright L, then the Lis 90°.
- Inverse: If an Lis NOT 900, then it is NOT a right L. (T)F
- Contrapositive: If an L is NOT a right L, then the L is not 90°. (T) F
- Biconditional: An L is 900 IFF it is a right L.
- 18) If two angles are right angles, then the angles are congruent.
- T (Converse: If 21's are =, then the 2 is are right is.
- T (F) Inverse: If 2 L's are not right L's, the the L's are not =.
- DF Contrapositive: If 21's are not =, then the 2 L's are not right 4
- Biconditional: No biconditional can be written.
- 19) If two lines are perpendicular, then they form right angles. Then the 2 lines are 1.
- Inverse: If 2 lines are not I, then they do not form right L's
- Contrapositive: If 2 lines do not form right L's, then they are not 1.
- Biconditional: 2 lines are I IFF they form right Lls.
- T © converse: If a figure has 4 sides, then the figure is a rectangle.
- T(F) Inverse: If a figure is NOT a rectangle, then it does NOT have 4 sides.
- (F) F Contrapositive: If a figure does not have 4 sides, then it is not a
 - Biconditional: No biconditional can be written.