

## Determine whether the conditional statement is true or false. If false, give a counter example. 3 intersecting lines form 2 pairs of vertical angles. Write the converse, inverse and the contrapositive of each statement. Then decide if each statement is true or false If it is August, then it is Summer.



Decide whether inductive reasoning or deductive reasoning is used to reach the conclusion.

Adding 2 consecutive numbers will always produce a number larger than either of the original numbers.



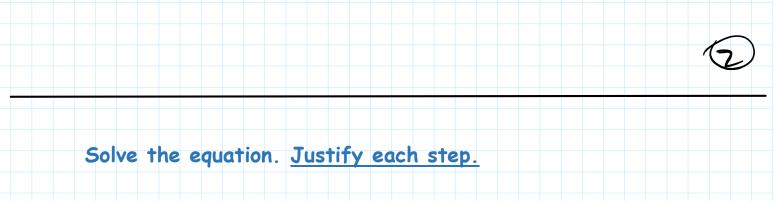
Use the Law of Syllogism to write a new conditional statement that follows from the pair of true statements (where possible).

If a shape has 3 sides, then it is a triangle.

If a shape is a triangle, then it has 3 angles

If a shape is a triangle, then it has 3 angles.

If you drive a car, then you have a license.
If you drive a car, then you fill the car with gas.



$$3x + 3 = 9(x - 1)$$



Identify the property that justifies the statement.

If  $m \angle 1 = m \angle 2$  then  $m \angle 2 = m \angle 1$ 

