## Test Review!



Use the diagram to determine whether the statement is true or false.

1. Points $F, C$, and $E$ are colinear. 2. $\angle C D E$ is a right angle.
2. intersects plane $R$ at point $A$.

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's a triangle.
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.

Solve the equation. Justify each step.
$3 x+3=9(x-1)$

Identify the property that justifies the statement.

$$
\text { If } m \angle 1=m \angle 2 \text { then } m \angle 2=m \angle 1
$$

Write a two column proof.
Given: $\angle 1$ and $\angle 2$ are complementary.
$m \angle 1=75^{\circ}$
Prove: $m \angle 2=15^{\circ}$


## 20 questions

## Good Luck!

