If-Then Statements and Counterexamples

For the following problems, underline the hypothesis and highlight the conclusion in each conditional statement.

1. If today is Monday, then tomorrow is Tuesday.

2. If a truck weighs 2 tons, then it weighs 4000 pounds.

Write each statement in if-then form.

3. All chimpanzees love bananas.

4. Collinear points lie on the same line.

Determine if each statement is true or false. If false, provide a counterexample.

5. If an animal can swim, then it is a fish.

6. If two angles are congruent, then they are right angles.

For the following problems, rewrite the statements in if-then form if needed. Then determine if each conditional statement is true or false. If false, provide a counterexample.

7. If John hurries, he arrives on time.

8. Two planes that intersect have many points in common.

9. Mary will be president if she campaigns.

10. The picnic will be canceled in the event of heavy rainfall.