

Name: _____

Identify the hypothesis and conclusion of each conditional.

1. If a figure has eight sides, then it is an octagon.
2. An animal is a mammal if it has fur.

Write the negation of each statement.

3. The window is closed.
4. The music is not loud.

Use the conditional: “If $x = 3$, then $x^2 = 9$.”

5. Write the converse.
6. Write the inverse.
7. Write the contrapositive.

Answer each question.

8. True or false: a conditional statement and its converse always have the same truth value. Explain.
9. Rewrite in if-then form: All right angles measure 90° .
10. Combine into a single biconditional: “If two segments are congruent, then they have the same length” and its (true) converse.