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Identify the hypothesis and conclusion of each conditional.

- 5. If you are an American citizen, then you have the right to vote.
- **6.** If a figure is a rectangle, then it has four sides.
- 7. If you want to be healthy, then you should eat vegetables.

Determine if the conditional is true or false. If it is false, find a counterexample.

- **16.** If a polygon has eight sides, then it is an octagon.
- 17. If you live in a country that borders the United States, then you live in Canada.
- 18. If you play a sport with a ball and a bat, then you play baseball.
- 19. If an angle measures 80, then it is acute.

If the given statement is not in *if-then* form, rewrite it. Write the converse, inverse, and contrapositive of the given conditional statement. Determine the truth value of all four statements. If a statement is false, give a counterexample.

- **20.** If you are a quarterback, then you play football.
- **21.** Pianists are musicians.

Algebra Write the converse of each statement. If the converse is true, write *true*. If it is not true, provide a counterexample.

35. If
$$x = -6$$
, then $|x| = 6$.

37. If
$$x < 0$$
, then $x^3 < 0$.