

Name _____

13-1A Lesson Master**Questions on SPUR Objectives**

See pages 833–835 for objectives.

PROPERTIES Objective C

In 1 and 2, identify the antecedent and the consequent of the if-then statement.

1. If a quadratic is factorable over the integers then the discriminant is a perfect square.

antecedent: _____

consequent: _____

2. The shopping mall is open if it is noontime.

antecedent: _____

consequent: _____

In 3 and 4, rewrite the statement as an if-then statement with a variable in it, underline the antecedent once and the consequent twice.

3. All penguins are flightless birds.
4. All polygons with four sides are quadrilaterals.

PROPERTIES Objective D

In 5–8, an if-then statement is given. Tell whether the statement is true or false.

5. If the area of a rectangle is 20, then its perimeter is 18. _____
6. If $4x + 15 > x + 6$, then $x < -3$. _____
7. If $\frac{m^6}{m^x} = m^3$, then $x = 2$. _____
8. If $x^2 + bx + 5$ is factorable over the integers, then $b = 6$. _____

USES Objective G

9. All alligators live in either China or the United States.
- a. Rewrite the statement as an if-then statement.
- b. Tell whether the statement is true or false. If false, find a counterexample that shows it is false.
