

Name _____

1-2

Lesson Master

Questions on SPUR Objectives
See Student Edition pages 71–75 for objectives.

SKILLS

Objectives B, C, and D

1. *Multiple choice.* Which of the following statements is not equivalent to the others? _____
- A *It is not the case that all circles are ellipses.*

B *No circles are ellipses.*

C *There is at least one circle that is not an ellipse.*

D *Some circles are not ellipses.*

In 2 and 3, write the negation of the statement.

2. \forall even numbers x , \exists an integer n such that $x = 2n$.

3. *Every rose has a thorn.* _____

In 4 and 5, a statement is given.

- a. Write the negation of the statement.

b. Which is true, the statement or its negation?
4. *There is a rational number r such that \sqrt{r} is rational.*
- a. _____

b. _____
5. *Some polygons have an interior angle that measures less than 1° .*
- a. _____

b. _____

PROPERTIES

Objectives E

In 6 and 7, *true or false*. Justify your answer with a definition or theorem.

6. The negation of a universal statement is an existential statement. _____

7. A statement and its negation can both be true. _____

USES

Objective I

In 8 and 9, give the truth value of the statement and the truth value of its negation.

8. *All of the dinosaurs were carnivores.* _____
9. *There is a country whose name begins with the letter Z.* _____