

Name \_\_\_\_\_

# 2-5A Lesson Master

## Questions on SPUR Objectives

See Student Edition pages 143–147 for objectives.

### SKILLS Objective C

In 1-3, use the variation equation  $t = 3r^2$ .

1. Find the rate of change between the points (1, 3) and (5, 75). \_\_\_\_\_
2. Find the rate of change from  $r = -2$  to  $r = -1$ . \_\_\_\_\_
3. Find the rate of change from  $r = 0$  to  $r = a$ . (Assume  $a \neq 0$ .) \_\_\_\_\_

### PROPERTIES Objective E

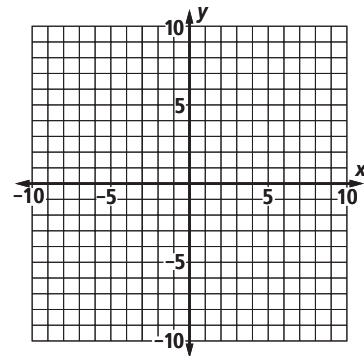
In 4-6, consider the graph of the variation equation  $y = kx^2$ .

4. Is the graph symmetric about the  $x$ -axis, the  $y$ -axis, both, or neither? \_\_\_\_\_
5. If the graph has points in the third quadrant, what do you know about  $k$ ? \_\_\_\_\_
6. If  $k > 0$ , give the range of the function. \_\_\_\_\_

### REPRESENTATIONS Objective I

In 7-9, graph the functions on the same set of axes at the right. Identify three points on each graph with integer  $x$ -coordinates.

7.  $y = -x^2$  \_\_\_\_\_
8.  $y = \frac{1}{4}x^2$  \_\_\_\_\_
9.  $y = -2x^2$  \_\_\_\_\_



### REPRESENTATIONS Objective J

In 10-12, the bold graph is represented by the equation  $y = x^2$ . Give a possible equation for each of the other graphs.

10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_

