

Name _____

6-3A Lesson Master

Questions on SPUR Objectives
See Student Edition pages 446–449 for objectives.

PROPERTIES Objective G

1. Describe how the graphs of $y = |x|$ and $y - k = |x - h|$ are related.

2. a. Solve $x^2 = 49$. _____

b. Use Part a to solve $(x - 2)^2 = 49$. _____

In 3 and 4, write an equation for a parabola that meets the given conditions.

3. Vertex $(5, -2)$, opens down, congruent to $y = 3x^2$

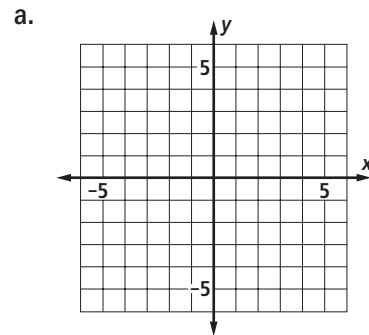
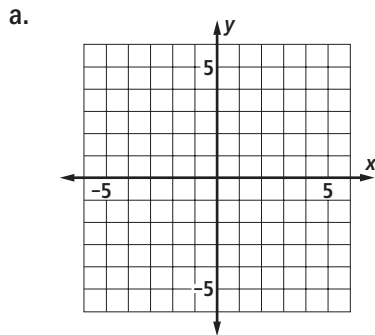
4. The image of $y = -\frac{1}{4}x^2$ under $T_{10, -2.5}$

REPRESENTATIONS Objective K

In 5 and 6, a. graph the equations on the same set of axes. b. Identify the translation that maps the first graph onto the second.

5. $y = |x|$ and $y + 5 = |x - 2|$

6. $y = 2(x - 3)^2$ and $y + 3 = 2(x + 1)^2$



b. _____

b. _____

7. Consider the parabola $y - 3 = -2(x + 4)^2$.

a. What is the vertex of the parabola? _____

b. What is the axis of symmetry? _____

c. Does the parabola open up or down? _____

d. Use Parts a through c to draw a rough sketch of the parabola at the right.

