

Name \_\_\_\_\_

# 12-2A Lesson Master

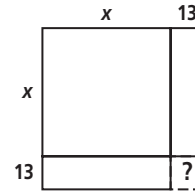
**Questions on SPUR Objectives**

See pages 773–775 for objectives.

## SKILLS Objective A

1. a. Find the sum of the areas of the three smallest rectangles at the right.

\_\_\_\_\_



- b. What is the area of the undrawn rectangle needed to complete the largest square? \_\_\_\_\_
- c. Write an algebraic expression to represent the area of the largest square using the sum of the areas of the four smaller rectangles. \_\_\_\_\_
- d. Write an algebraic expression using the side length of the largest square to represent the area of the largest square. \_\_\_\_\_

In 2–5, a quadratic expression is given.

- a. What number must be added to the expression to complete the square?
- b. After adding that number, the expression is the square of what binomial?
- |                |          |                         |          |
|----------------|----------|-------------------------|----------|
| 2. $x^2 + 14x$ | a. _____ | 3. $n^2 - 32n$          | a. _____ |
|                | b. _____ |                         | b. _____ |
| 4. $t^2 + 17t$ | a. _____ | 5. $a^2 - \frac{2}{5}a$ | a. _____ |
|                | b. _____ |                         | b. _____ |

## REPRESENTATIONS Objective I

6. Let  $y = x^2 + 6x + 14$ .
- a. Find the vertex of the parabola.
- b. Sketch a graph of the parabola.

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