

Name \_\_\_\_\_

# 1-3A Lesson Master

## Questions on SPUR Objectives

See Student Edition pages 66–69 for objectives.

### SKILLS Objective B

- Let  $h(x) = \sqrt{3x + 5}$ .
  - Rewrite the function using mapping notation. \_\_\_\_\_
  - $h : 8$  \_\_\_\_\_      c.  $h : -1$  \_\_\_\_\_      d.  $h : 2a \rightarrow$  \_\_\_\_\_
- Let  $r : c \rightarrow \frac{2c + 10}{c}$ .
  - Rewrite the function using  $f(x)$  notation. \_\_\_\_\_
  - Find  $r(3b) - r(6)$ . \_\_\_\_\_
  - Why is  $r(c)$  undefined when  $c = 0$ ? \_\_\_\_\_

### USES Objective J

- In the table below,  $A(x)$  is the total attendance, in millions, at Major League Baseball games in year  $x$ .

$x$	2000	2001	2002	2003	2004	2005	2006	2007
$A(x)$	72.7	72.6	67.9	67.6	73.0	74.4	76.0	79.4

Source: www.ballparksofbaseball.com

- $A(2002) - A(2001) =$  \_\_\_\_\_
  - Explain in words what you calculated in Part a.  
\_\_\_\_\_
- The U.S. Department of Health and Human Services uses a cutoff to determine who qualifies for various programs like food stamps and heating assistance. Any family with an annual income below the cutoff qualifies. In 2008, the cutoff for a family with  $n$  members was  $P(n) = 6800 + 3600n$ .
    - What was the cutoff for a family of 4 in 2008? \_\_\_\_\_
    - A family made only \$16,000 in 2008 but still was above the cutoff. What is the largest the family could be?  
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