Name

8-3A Lesson Master

Questions on SPUR Objectives
See Student Edition pages 574–577 for objectives.

SKILLS Objective B

In 1–3, find an equation for f^{-1}.

1. $f(x) = 3 - 5x$ _____

2. $f(x) = mx + b$ _____

3. $f(x) = x^{\frac{5}{7}}, x \geq 0$ _____

PROPERTIES Objective F

4. **Fill in the Blank** If $f(21.6) = 3.71$, then $f^{-1}(3.71) =$ _____.

5. **Fill in the Blank** If a function b has an inverse b^{-1}, then $b(b^{-1}(n)) =$ _____.

6. Let $g(x) = \frac{7}{3}x + 5$ and $h(x) = \frac{3}{7}x - 5$.

   a. $g(h(x)) =$ _____ b. $h(g(x)) =$ _____

   c. Are g and h inverses? Explain.

_____

_____

REPRESENTATIONS Objective J

In 7 and 8, a function is graphed below each question. Write a restriction of the domain so that the inverse is also a function. Then draw the inverse on the same graph.

7. $f(x) = (x - 2)^2 - 3$

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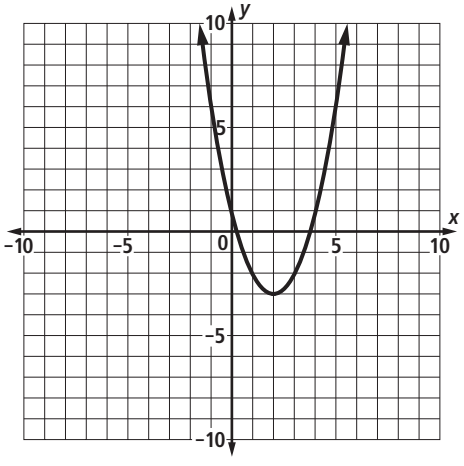

8. $g(x) = \frac{x^4}{4}$

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