Lesson 1.5 Practice: Inverse Functions

School Launch · Algebra II · Unit 1: Functions and Their Graphs · Worksheet A

Calculator for decimals

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. Find the inverse of $f(x) = -2x$ and verify $f(f^{-1}(x)) = x$. EASY

2. Find the inverse of $f(x) = -x - 3$ and verify $f(f^{-1}(x)) = x$. EASY

3. Find the inverse of $f(x) = -3x - 5$ and verify $f(f^{-1}(x)) = x$. EASY

4. Find the inverse of $f(x) = \frac{6x}{5} + \frac{3}{5}$ and verify $f(f^{-1}(x)) = x$. MEDIUM

5. Find the inverse of $f(x) = \frac{3x}{5} + \frac{4}{5}$ and verify $f(f^{-1}(x)) = x$. MEDIUM

6. Find the inverse of $f(x) = -\frac{5x}{2} - 3$ and verify $f(f^{-1}(x)) = x$. MEDIUM

7. Find the inverse of $f(x) = -\frac{5x}{3} - \frac{1}{3}$ and verify $f(f^{-1}(x)) = x$. MEDIUM

8. Find the inverse of $f(x) = 2x^3 - 6$ and verify $f(f^{-1}(x)) = x$. HARD

9. Find the inverse of $f(x) = 3x^3 - 9$ and verify $f(f^{-1}(x)) = x$. HARD

10. Find the inverse of $f(x) = x^3 + 2$ and verify $f(f^{-1}(x)) = x$. HARD