

Math 1513 - College Algebra

Discussion Board Week 11 - Due 2012.03.31

For each of the following functions $f(x)$, find $f^{-1}(x)$. Also verify that $(f \circ f^{-1})(x) = (f^{-1} \circ f)(x) = x$.

1. $f(x) = \frac{3x}{x-1} + 2$

2. $f(x) = 8 - \frac{2}{3x}$

3. $f(x) = \frac{4x-2}{x+1}$

4. $f(x) = 1 - \frac{2+3x}{4-6x}$

5. $f(x) = 9 + \frac{3x}{x+1}$

6. $f(x) = \frac{2}{5+3x} - 4$

7. $f(x) = \frac{5+3x}{2+x} - 9$

8. $f(x) = \frac{7}{2}x - \frac{3}{x}$

9. $f(x) = \frac{7-x}{2x} + 8$

10. $f(x) = \frac{8x+9}{x} - 1$

11. $f(x) = \frac{x}{8x+9} + 2$

12. $f(x) = \frac{3-x}{3+x} - 7$

13. $f(x) = \frac{3-2x}{4-3x} + 5$

14. $f(x) = \frac{6+8x}{-2+x} + 1$

15. $f(x) = \frac{4x-8}{7x+6} - 2$

16. $f(x) = 2 + \frac{4-8x}{7x+6}$

17. $f(x) = \frac{4-8x}{7+6x} - 8$

18. $f(x) = \frac{8+9x}{8x+9} - 2$

19. $f(x) = \frac{4+3x}{9x+3} - 7$

20. $f(x) = \frac{2+x}{-2+x} - 4$

21. $f(x) = 6 + \frac{2+3x}{-5+4x}$

22. $f(x) = \frac{2+3x}{-3+4x} - 2$

23. $f(x) = 1 + \frac{1+x}{10x-1}$

24. $f(x) = 5 + \frac{2x+3}{-3x+4}$