Review Sheet for Test on Inverses Name_____

1. Find the inverse of $y = 3x^2 - 7$

2. Find the value of $\log_4 64$

3. Express $\log_6(2x+1) - \log_6(x) + \log_6(3x^2)$ as a single log

4. Solve the equation $e^{5x-7} = 10$

5. Let $f(x) = 2x^2 - e^x$ Find $f^{-1}(3)'$

Find the derivative:

6. $f(x) = 3e^x - 4x^2 + \sqrt{\ln e}$

7. $f(x) = \log_7(6x^2)$

8. $f(x) = e^{x^3}$

9. $f(x) = 10^{\sec x}$

10. $f(x) = \ln(4x^2 + 4x)$

11. $f(x) = x^{\sin x}$

12. $f(x) = x^2 e^{4x-6}$

13. $f(x) = e^{\sqrt{x-7}}$

14. $f(x) = \tan^{-1}(2x^3 + 3x)$

15. $f(x) = \sin^{-1}(6x)$

16. $f(x) = \cos^{-1}(x^4)$

17. $f(x) = \csc^{-1}(\frac{1}{x})$

18. $f(x) = \csc^{-1}(6x - 9)$

19. Find the value of $\tan^{-1}(\frac{\sqrt{2}}{2})$