Math 1A Midterm 1. 2004-9-30 answers

1. $x \geq 4$

2. Graph should come down to $(-1, 0)$, then go back up and come down again at $(1, 0)$, then go up again. At these 2 points the graph should have "corners".

3. $x = \log(y)^2$

4. $-\infty$

5. -3

6. $c = -2$

7. $x = 1$

8. 4

9. $y - 1 = 3(x - 1)$ or $y = 3x - 2$

10. Graph of function should pass though $(0, 0)$ and $(1, 0)$ and should slope down at both these points.

11. All x, derivative is $2|x|$.

12. $-16x^{-11/3}$.

13. $(x, y) = (-1, 0)$. (Accept just $x = -1$ as correct.)

14. $(x^3 + 3x^2 + 1)e^x$.

15. $2e^x/(e^x + 1)^2$