**Exponential Functions Day 84 Homework Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Do your best and show your work.

For Problems 1-10, use properties of exponents to write each of the following expressions in a simpler equivalent form.

1. (*y*10)(*y*3) 6**.** (3*x*2*y*3)(4*x*4*y*7)
2. (*a*4)3 7.(2*xy*5)3
3. (*b*2)0 8.(–3*a*5)2(2*ab*3)
4. c8/c2 9. 18x6/3x3
5. (3t)-2 10. 6xy-1

Express in correct scientific notation:

11. 61,500

12. 0.0000568

13. 321

14. 64,960,000

15. 0.07085

Express in standard form:

16. 1.09 x 103

17. 4.22715 x 108

18. 3.078 x 10-4

19. 9.004 x 10-2

20. 5.1874 x 102