

Name: \_\_\_\_\_ Period: \_\_\_\_\_

## HW 4-7: Using All Exponent Rules

Score:

\_\_\_\_\_/\_\_\_\_\_  
\_\_\_\_\_%

Answer each question completely. Show your work. Simplify the expression.

1.  $b^3 \cdot b^6$

2.  $7^{-2}$

3.  $y^6xy^3$

4.  $\frac{10x^3y^9}{2x^2y^7}$

5.  $(-6)^{-2}$

6.  $6^{-3}$

7.  $\frac{b^3b^6}{b^9}$

8.  $2b^3b^4$

9.  $(x^4)^9$

10.  $(8x^4y^3)^2$

11.  $4x^0y^2$

12.  $\frac{12x^2y^3}{4xy}$

13.  $(x^4)(x^{-9})$

14.  $p^5q^2p^{-2}r^3$

15.  $(-4b^{-3}a^6c^{-12})^0$

16.  $5x^0$

17.  $\frac{3^{-3}}{5^{-2}}$

18.  $\frac{x^{-1}}{6^2}$

19.  $\frac{10^3}{7^{-2}}$

20.  $\frac{1}{5^{-3}}$

21.  $\frac{7^{-1}}{3^3}$

22.  $\frac{3^2}{t^{-3}}$

23.  $\frac{4^{-1}}{t}$

24.  $6y^{-4}$