

Name \_\_\_\_\_

Homework # \_\_\_\_\_

## Negative and Zero Exponents

1.  $x^0 = \underline{\hspace{2cm}}$  if  $x$  is a number such that  $x \neq 0$ .

Write each expression into an equivalent expression involving a positive exponent.

2.  $10^{-4}$

3.  $2^{-1}$

4.  $m^{-6}$

5.  $(\frac{2}{3})^{-2}$

6.  $r^{-3}$

Compute each value using the definitions of zero and negative exponents.

7.  $10^0$

8.  $(-4)^0$

9.  $y^0$

10.  $(2K)^0$

11.  $3^{-2}$

12.  $2^{-4}$

13.  $(-6)^{-1}$

14.  $(-1)^{-5}$

15.  $10^{-1}$

16.  $10^{-2}$

17.  $10^{-3}$

18.  $10^{-4}$

$$19. 4(10)^{-2}$$

$$20. 1.5(10)^{-3}$$

$$21. 7^0 + 6^{-2}$$

$$22. \left(\frac{1}{2}\right)^0 + 3^{-3}$$