

## Master 2.18

## Extra Practice 2

## Lesson 2.2: Powers of Ten and the Zero Exponent

1. Evaluate each power.

a)  $4^0$                       b)  $23^0$                       c)  $(-6)^0$

d)  $1^0$                       e)  $-1^0$                       f)  $(-1)^0$

2. Write each number as a power of 10.

a) 10 000                      b) 1 000 000                      c) one billion

d) ten                      e) 1

3. Use powers of 10 to write each number.

a) 700 000 000 000                      b) 7000

c) 77 077                      d) 7 000 007

4. Write each number in standard form.

a)  $(8 \times 10^5)$

b)  $(9 \times 10^7) + (9 \times 10^6) + (5 \times 10^5)$

c)  $(2 \times 10^3) + (2 \times 10^2) + (6 \times 10^0)$

d)  $(5 \times 10^5) + (4 \times 10^8) + (8 \times 10^0) + (3 \times 10^4)$

5. Write these numbers in standard form, then order them from least to greatest.  
fifty-five hundred

50 500

$(5 \times 10^6) + (5 \times 10^0)$  \_\_\_\_\_

five hundred thousand \_\_\_\_\_

$5 \times 10^4$  \_\_\_\_\_

500 500

**Highest** \_\_\_\_\_ **Lowest**

6. a) Complete this table for a base of 10.

Exponent	Power	Standard Form
6	$10^6$	
5		
4		
3		
2		
1		
0		

- b) Use patterns to describe why the power with an exponent of 0 is equal to 1.