

Name \_\_\_\_\_

Exponent Review Assignment #1

Math 8

\_\_\_\_\_ out of 6 points total

Directions: Use your exponent note sheet to finish this assignment. Be sure to **show all work**.

1) Simplify  $(-2)^2 \cdot (-2)^{-8}$

A)  $4^{-6}$

C)  $(-2)^{-16}$

B)  $\frac{1}{64}$

D) 64

2) Which is equivalent to  $(4^2)^{-3}$

A)  $4^{-6} \cdot 4^1$

C)  $4^1$

B)  $\frac{1}{4}$

D)  $\frac{1}{4^6}$

3) Which is equivalent to  $\left(\frac{1}{2}\right)^{-3}$

A) 8

C)  $\frac{1}{8}$

B)  $\frac{1}{6}$

D)  $-\frac{1}{8}$

Back →

4) Which expression is equivalent to  $8^5 \times 8^4$  ?

A)  $8^{20}$

C) 8

B)  $8^{13} \div 8^4$

D)  $8^6 \div 8^3$

5) The of population of CITY A is  $4.8 \times 10^7$  while the population of CITY B is  $1.2 \times 10^4$

**Part A** How many times greater is the population of CITY A than the population of CITY B?

*Show your work*

*Answer in standard form* \_\_\_\_\_

**Part B** How many more people does CITY A have compared to CITY B?

*Show your work*

*Answer in standard form* \_\_\_\_\_

*Answer in scientific notation* \_\_\_\_\_