## Attendance Quiz # 18 for Dr. Z.'s Number Theory Course for Nov. 7, 2013

**NAME:** (print!) \_\_\_\_\_

E-MAIL ADDRESS: (print!)

1. Which of the following are perfect numbers? Explain!

**a.** 49 ; **b.** 28

2. (Without peeking at your notes), prove that if p is a prime, and  $2^p - 1$  is also a prime, then

$$2^{p-1} \cdot (2^p - 1)$$

is a perfect number.