

Quiz # 8 for Dr. Z.'s Number Theory

NAME: (print!) _____

E-MAIL ADDRESS: (print!) _____

1. Find $\sigma(200)$

2 (a) Define a perfect number

(b) Prove that if both p and $2^p - 1$ are primes, then

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

is a perfect number.