

Assignment #2

Yufeng Chinese School Math Enrichment

Name: _____

1. (2) Does 50 divide 100? Why or why not? Does 50 divide 80? Why or why not?

$$100 = 50 \times 2 \text{ so yes}$$

$$80 = 50 \times (8/5) \text{ so no}$$

2. (2) Is 675 a multiple of 5? Why or why not? Is 236 a multiple of 10? Why or why not?

$$5 \text{ divides } 675 \text{ because it ends in } 5$$

$$236 \div 10 \text{ is not an integer so no}$$

3. (2) Give the formal definition of a multiple of a positive integer a.

a positive integer b is a multiple of a if $b = c \times a$, c is positive integer

4. (4) Write the prime factorization of 51200 using power notation. (Hint: Use the algorithm!)

$$51200 = 2^5 \times 4^3 \times 5^2$$