

*Name:* \_\_\_\_\_

1. (2) Does 50 divide 100? Why or why not? Does 50 divide 80? Why or why not?
  
  
  
  
  
  
  
  
  
  
2. (2) Is 675 a multiple of 5? Why or why not? Is 236 a multiple of 10? Why or why not?
  
  
  
  
  
  
  
  
  
  
3. (2) Give the formal definition of a multiple of a positive integer  $a$ .
  
  
  
  
  
  
  
  
  
  
4. (4) Write the prime factorization of 51200 using power notation. (Hint: Use the algorithm!)