

**Math 270 - Basic Discrete Mathematics**  
**Practice Quiz on Section 4.4**

**Directions:** Answer the problems given below.

1. Determine which of the following are true and indicate your answer by circling either **True** or **False**.

a.  $8|32$  **True** or **False**

b.  $4|2$  **True** or **False**

c.  $6|3a^2 \cdot 10b^3$  where  $a, b$  are (any) integers. **True** or **False**

d.  $99|0$  **True** or **False**

2. Prove that for all integers  $a, b, c$ , if  $a|b$  and  $a|c$  then  $a|(3b + 4c)$ .