

**MA 261 — Quiz #3**  
Friday, February 14, 2014

**1.** Let  $a, n, b, r,$  and  $d$  be integers. If  $a = nb + r$  and  $d|a$  and  $d|b$ , then  $d|r$ .

**2.** Illustrate problem **1.** when  $a = 45, n = 7,$  and  $b = 6$ . Which values for  $r$  and  $d$  work?