

## 01204211: Exercises 10-1

1. (LPV-6.1.3) Prove that if  $a|b$  and  $a|c$ , then  $a|(b+c)$  and  $a|(b-c)$ .
2. (LPV-6.1.6) Prove that for every integer  $a$ ,  $a-1|a^2-1$ .
3. (LPV-6.3.3) Suppose that  $a$  and  $b$  are integers and  $a|b$ . Suppose that  $p$  is a prime and  $p|b$ , but  $p \nmid a$ . Prove that  $p|(b/a)$ .