

Midterm practice

cs235

October 24, 2018

1. Prove that if $\gcd(n, (n-1)!) = 1$ i.f.f n is prime.
2. Let p be a prime number. Show that $p!$ is not a perfect square.
3. Let n be an integer. Show that if a, b are relatively prime integers, each of which divides n , then ab divides n .