

# Problem Set 3

September 23, 2024

**Problem 1.** Find the factorization for 36 and 50. Then use it to calculate  $\gcd(36, 50)$

**Problem 2.** Let  $a, b$ , and  $c$  be positive integers. Suppose that  $\gcd(a, b) = 1$  and suppose further that  $a$  divides  $bc$ . Prove that  $a$  divides  $c$ .