## Fall 2019, Math 579: Preliminary Problem Set 2 Due: Thursday, September 5th, 2019 Elementary Counting Methods

**Preliminary problems.** These problems should be completed before discussion on Thursday.

(P1) Determine how many 5-digit numbers are divisible by 5 and have middle digit 6.

(P2) Let  $n = 2^4 \ 3^5 \ 5^2 \ 7^1$ . How many positive divisors does n have?