

Quantitative Reasoning 28: The Magic of Numbers

Homework 1

Assigned on February 4

Due at 5:00 p.m. February 7

Please submit problem sets to the boxes outside the Math Department's main office, on the third floor of the Science Center (Room 325).

Reading:

Gross-Harris, Chapter 1

Problems:

Please explain your reasoning and show your work.

1. How many numbers are there between 291 and 503, inclusive?
2. How many numbers are there between 61 and 194, inclusive? How many of them are even? How many are odd?
3. How many three-digit numbers (that is, numbers between 100 and 999, inclusive) are divisible by 7? How many are divisible by 17? (*Hint:* part of this problem will be to figure out the smallest and largest such number.)