In-class, Week 9, day 2

Section 7.4, Problem 8: What is the expected sum of the numbers that appear when three fair dice are rolled?

Section 9.1, Problem 6: Determine whether the relation R on the set of all real numbers is reflexive, symmetric, antisymmetric, and/ or transitive where $(x, y) \in R$ if and only if

- a) $x \neq y$
- **b)** xy > 0
- c) x = y + 1 or x = y 1
- d) $x \equiv y \mod 7$
- e) x is an integer multiple of y
- \mathbf{f}) x and y are both negative or are both nonnegative
- **g**) $x = y^2$
- **h**) $x \ge y^2$