MATH 113: DISCRETE STRUCTURES
READING QUESTIONS FOR FRIDAY WEEK 1

Reading assignment. *DM:EB* §1.2.

Question 1. Let M denote the set of students in our section of Math 113, let H denote the set of students currently in Hum 110, and let P denote the set of students currently in Physics 101. Write an expression in terms of M, H, and P which determines the set of students currently in Hum 110 who are not in our section of Math 113 and are not currently in Physics 101.

Question 2. Is the statement "$x \in A$" a special case of "$x \subseteq A$"? What subset expression is true when $x \in A$?

Question 3. What is the common name for the set

$$\{x \in \mathbb{Z}_+ \,:\, x > 1 \text{ and if } n \in \mathbb{Z}_+ \text{ divides } x, \text{ then } n = 1 \text{ or } x\}?$$

Problem 4. Write a formula for $A \triangle B$, the symmetric difference of sets A and B, in terms of A, B, $\cup$ (union), $\cap$ (intersection), and $\setminus$ (set difference).

Problem 5. Problem 1.2.8 of *DM:EB*.