Sets

- Read pages 14 through 17 (section 1.1)
- Some key questions to answer:

  1. A set is a collection of objects. What terms do we use to refer to those objects?
  2. How do we typically denote sets? How do we denote their elements?
  3. How do we denote the statement "The element a belongs to the set A"? What about an element not belonging to a set?
  4. How do we describe a set consisting of a small number of elements?
  5. How do we describe larger sets?
  6. Can a set be an element of another set?
  7. How many sets are there that have no elements at all?
  8. How do we denote the set of elements satisfying a certain property?
  9. Describe in words the kind of construction that example 1.2 demonstrates.
  10. There are six standard sets of numbers that have a specific notation. Describe them.
  11. What is the cardinality of a set?
  12. Work out example 1.3 without looking at the solution.
  13. Work out example 1.4 without looking at the solution.
  14. Food for thought: Can a set be an element of itself?

- Practice problems from section 1.1 (page 29): 1.2, 1.6, 1.7, 1.9