## Read

Symbolically Write Guidelines,

which is posted both on the homework page and handout page for your convenience.

**Exercise.** A variant of Exercise 3.2.1c,d.

**Theorem 1c**. The integer n is even if and only if  $n^3$  is even.

**Theorem 1d**. The integer n is odd if and only if  $n^3$  is odd.

**a.** Symbolically write Theorem 1c.

## cut this out and put your solution here

**b.** Prove Theorem 1c. You may use any result in §1.3 (Ch. 1 Summary p. 31-32) and/or the definition of even/odd.

*Proof.* cut this out and put your solution here

**c.** Symbolically write Theorem 1d.

cut this out and put your solution here

**b.** Prove Theorem 1d. You may use Theorem 1c.

*Proof.* cut this out and put your solution here

§3.2 p112