Chapter 4 roadmap:

- Subset proofs (Wednesday)
- Set equality and emptiness proofs (Today)
- Conditional and biconditional proofs (next week Monday)
- Proofs about powersets (new week Wednesday)
- From theorems to algorithms (next week Friday)
- (Start Chapter 5 week after next)

Today:

- Proofs that sets are equal
- Proofs that a set is empty

Project proposal due TODAY, Friday, Sept 30.

General forms:

- 1. Facts (*p*) Set forms
 - 1. Subset $X \subseteq Y$
 - 2. Set equality X = Y
 - 3. Set emptiness $X = \emptyset$
- 2. Conditionals $(p \rightarrow q)$
- 3. Biconditionals $(p \leftrightarrow q)$

For next time:

Pg 160: 4.3.(3, 14, 15, 18) Pg 161: 4.4.(5 & 6)

See assignment on Schoology for hint on Ex 4.3.15.

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Read 4.(5–8) Take quiz

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