Intro to Proofs Day 4 Outline (This class meets for 1 hour and 50 minutes.)

**Need 2.3 worksheets, quizzes and synthesis to hand back, note cards with logical equivalences**

**Present Synthesis Activities** [0-15 minutes]

* Section 1.2 Exercise 2(a)
  + Have them trade and read each others. Check off writing guidelines check list. Answer their questions
* Section 2.1 Exercise 1
  + Daisy says “If it does not rain then I will play golf”. Later you find out it did rain but Daisy still played golf. Was Daisy’s statement true or false?

**Section 2.2** [15-50 minutes]

* They do page 2 and discuss
* They do page 3 and discuss
* Discuss Preview Activity Slide 2
* Do logical equivalences on board

---------------------------------BREAK ---------------------------------------------------

**Section 2.2 – Practice Negating** [60-80 minutes]

* Work on page 4 of 2.1-2.2 worksheet
* Depending on struggle, do extra practice negating

**Section 2.3 - Sets** [80-110 minutes]

* Discuss preview activity
* They work on page 1 of Section 2.3 worksheet
* If time: introduce set builder notation – another way to write sets – universal set and then a rule for being there.
* They work on page 2 of Section 2.3 worksheet

For next time: SA4: Section 2.2 #1 - directions differ from book! Write the converse, contrapositive, and negation for each of (a) and (c). Which statements have the same truth value as the original? Which have different truth values. Section 2.2 #3(f) and (h). MAYBE Section 2.3 #1 (choose some parts). PA4: Quantifiers (Section 2.4)