

MATH 636, Fall 2014

HOMEWORK B

Due 3:10PM on Thursday, October 1.

Assignment: Turn in written or typed solutions to homework questions 4-2, 5-2, 6-3, and Question B-1:

B-1. Let a_n be the maximal number of pieces into which you can cut a circle using n lines. **Determine by hand** the first few values of a_n . Use the Online Encyclopedia of Integer Sequences (OEIS) to determine what the formula is for a_n as a function of n .

Once you have found the sequence, there are links right after the first few terms of the sequence. You should look at the graph of the sequence and listen to the sequence. On your homework, write down the 42nd term of the sequence.

Then, via the WebCam link at the bottom of the page, look through a few sequences and write down a sequence that looks interesting (its sequence number, its description, and a few first terms) and last, write one to two paragraphs about why you thought it was interesting.