

Math 375, Spring 2026, Quiz 30, 5/6/26

Name:

A shawl has 16 stitches in the first row, and each row has 2 more stitches than the previous row.

- a) How many stitches total would be in the first 50 rows?
- b) How many stitches total would be in the first 73 rows?
- c) Suppose that after 50 rows, you have used exactly half of your yarn. Will there be enough yarn left for the next 23 rows? (To get to a total of 73 rows.)
- d) Will it be close?

Ans

- a) 3,250 stitches
- b) 6,424 stitches
- c) Yes, since those rows will require $6424 - 3250 = 3174$ stitches
- d) So close! Enough yarn left for only 76 stitches, less than the next row would be (162 stitches).