Problem of the Week
Problem B
A String of Beads

Aurora is making a beaded necklace using black and green beads. The black beads are all 1.2 cm wide and the green beads are all 4 mm wide. Aurora will make her necklace by alternating the black and green beads.

(a) If Aurora wants her necklace to be 80 cm long, how many beads will she need in total?

(b) If the black beads cost $0.10 each and the green beads cost $0.03 each, how much will it cost for Aurora to buy all the beads she needs for her necklace?

(c) Would it cost more or less for Aurora to buy the beads if instead of alternating the black and green beads, she put two green beads after each black bead? Explain.