# The Optimal Cereal Box

Now that we've talked about maximizing functions, we are going to get our hands dirty and create an optimal cereal box. With a partner, you will put your calculus skills to the test to mathematically find the best (according to the directions) cereal box.

You and your partner are responsible for finding the best cereal box. Using equations, graphs, and diagrams, convince another partner pair that you have, without a doubt, found the optimal solution.

Look at the "Cereal Box Directions" slide for your constraints, and happy designing!

Your new company is making the world’s most awesome cereal yet, it’s 98% sugar! These Lucky Harms are going to be packaged in small boxes that students can hide in their laps so they can hide them under their desks at school and sneak handfuls of it during class. The boxes are going to be cut out of a 8 inch by 10 inch piece of cardstock and folded into a sealed box with two flaps on top. Determine the dimensions of the box that will hold the most cereal.

