A company is designing a cylindrical soda can to hold 350 milliliters. Because of a difference in manufacturing costs, the sides are slightly cheaper to produce than the top and the bottom.

1. If the sides cost 0.02 cents per $cm^2$ and the top and bottom cost 0.05 cents per $cm^2$, find the dimensions that minimize the cost of the can. How much does it cost?

2. How will your answers change if the top and bottom cost 0.10 cents per $cm^2$?

3. The company is not certain that the price for the top and bottom will remain stable. Find the dimensions that minimize the cost of the can if the top and bottom cost $s$ cents per $cm^2$.