

Name: _____
AP Calc AB: Optimization

Date: _____
Ms. Loughran

Do Now

1. A rectangular plot of land is to be fenced in using two kinds of fencing. Two opposite sides will use heavy-duty fencing selling for \$3 a foot, while the remaining two sides will use standard fencing selling for \$2 a foot. What are the dimensions of the rectangular plot of greatest area that can be fenced in at a cost of \$6000?

2. A cylindrical can is to have a volume of 400 cubic centimeters. Find the dimensions of the can so as to minimize its total surface area.