

50. Answers:

$$P_x = 10 - 0.002x$$

$$P_y = 6.4 - 0.05y$$

$P_x(100,16) = \$9.80$  (If you increase the number of pounds of Kisses by one pound, the profit will increase by \$9.80)

$P_y(100,16) = \$5.60$  (If you increase the number of pounds of Kremes by one pound, the profit will increase by \$5.60).

What is the maximum profit?

$P(5000,128) = \$25,409.60$  is the maximum profit.