Name _____

Homework 26
section 4.4

1. (12) A builder intends to construct a storage shed having a volume of 900 ft^3, a flat roof, and a rectangular base. For structural integrity purposes, the width is to be three-fourths the height. The cost per square foot of the materials is \$3 for the floor, \$5 for the sides, and \$6 for the roof. What dimensions will minimize the cost of the shed?

2. (8) Which point on the curve $y^2 = 2x$ is closest to the point $(1, 4)$? Give the **coordinates** of the point.