Assignment 9
Due Monday, Nov. 27

12.2.1, 12.2.4, 12.3.6, 12.4.6

E.1. Using Lindo, solve the Cutting Stock problem with raw rolls of width 100 inches and the following orders:

Final width	Quantity
21 inches	212
27 inches	132
29 inches	125
37 inches	54
52 inches	77

E.2. The Rosenbrock function is $f(x, y) = 100(y - x^2)^2 + (1 - x)^2$.

(a). Find a critical point of this function. Is it a local maximum or a local minimum?

(b). Find a convex set (as large as possible) on which $f(x, y)$ is a convex function.

Hint: There are lots of correct answers. They can be written in the form
$$\{(x, y) : y \le ax + b\}$$