$\begin{array}{c} \text{MATH 101-(141)} \\ \text{QUIZ} \ \# \ 6 \end{array}$

NAME:	 ID. #:	

Q1. What is the smallest perimeter possible for a rectangle whose area is $100cm^2$, and what are its dimensions?

Q2. Find the dimensions of the rectangle of largest area that has its base on the x-axis and its other two vertices above the x-axis and lying on the parabola $y = 8 - x^2$?