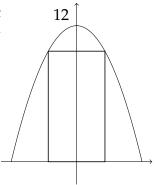# Quiz 7 — Wednesday, August 11

Name: _____

1. (*4 points*)   Find the dimensions of the rectangle of largest area that has its base along the x-axis and its other two vertices on the parabola $y = 12 - x^2$ above the x-axis.

2. (*3 points*) Use a linear approximation to estimate $\sqrt{8.94}$. Show your work.

3. (*3 points*) Compute $\lim\limits_{x \to 0} \dfrac{\sin 3x}{\tan 7x}$.