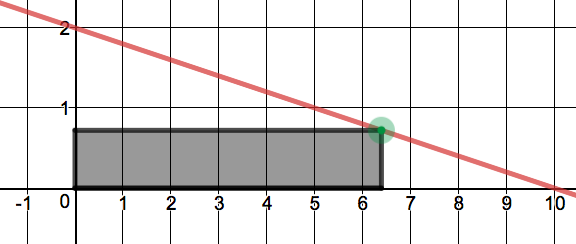
|  |  |  |
| --- | --- | --- |
| NAME | Date | Band |
| **Introduction to Optimization (Part II)**  Calculus | Packer Collegiate institute | | |

**Challenge #1**

Label the marked point and then all of the sides of the rectangle. (The equation of the line was .)

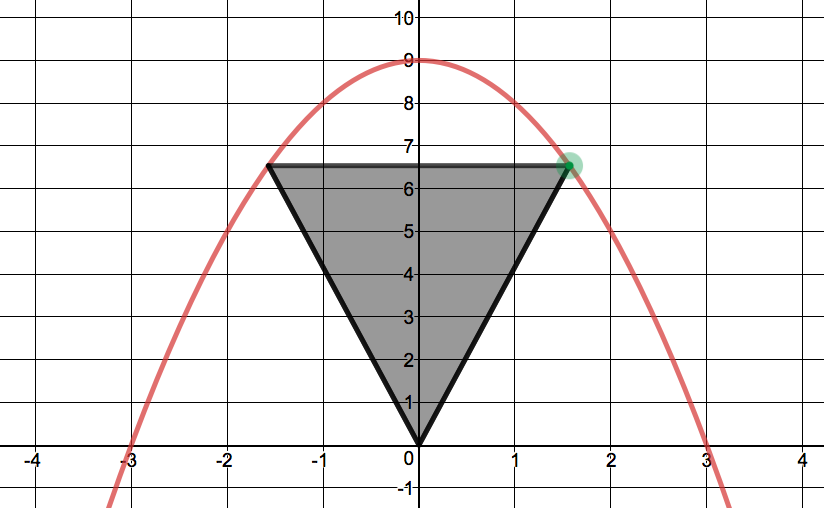


Use calculus to determine the dimensions of the rectangle with the largest area.

Width: Height: Area:

**Challenge #3**

Label the marked point and the base and height of the triangle. (The equation of the parabola was .)

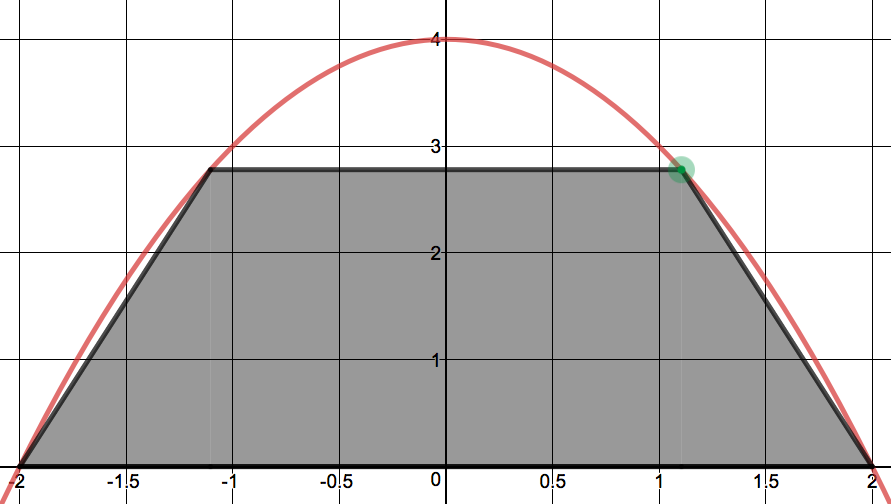


Use calculus to determine the dimensions of the triangle with the largest area.

Base: Height: Area:

**Challenge #4**

Label the marked point and the trapezoid’s bases and height. (The equation of the parabola was .)



Use calculus to determine the dimensions of the trapezoid with the largest area.

Base1: Base2: Height: Area: