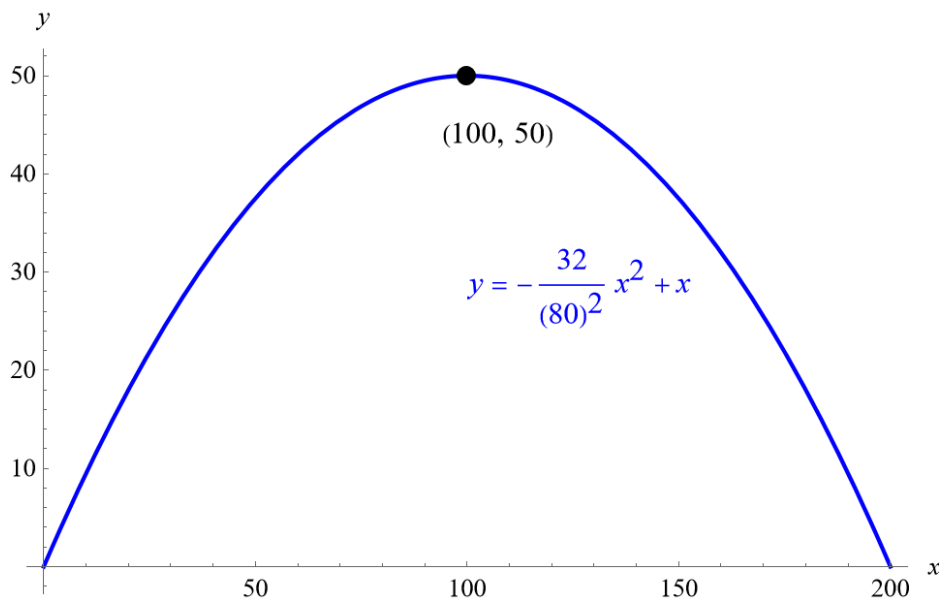## Exercise 73

The path of an object projected at a 45 degree angle with initial velocity of 80 feet per second is given by the function $h(x) = \frac{-32}{(80)^2}x^2 + x$ where x is the horizontal distance traveled and $h(x)$ is the height in feet. Use the **TRACE** feature of your calculator to determine the height of the object when it has traveled 100 feet away horizontally.

Solution

The y-coordinate corresponding to $x = 100$ is 50, so the height of the object is 50 feet when it is 100 feet away horizontally.