

One of the most popular tourist attractions in St. Louis, Missouri, is The Gateway Arch – the tallest man-made monument in the United States. Its height in feet,  $H$ , can be modeled by the quadratic equation  $H = -0.00635x^2 + 4x$ , where  $x$  represents the distance in feet from one of the legs of The Arch.



How tall is The Gateway Arch at its highest point?

629.92ft. (y-coordinate of the vertex)

How far apart are the two legs of The Gateway Arch?

629.92ft. (x-intercept)