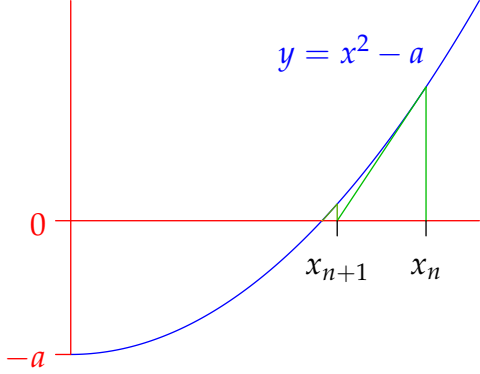


$$y = x^2 - a$$


The graph shows a blue parabola opening upwards, intersecting the horizontal red x-axis at two points. The y-axis is also shown as a vertical red line. The origin is marked with a red '0'. The y-intercept is labeled with a red '-a'. Two points on the x-axis are marked with vertical tick marks and labeled x_{n+1} and x_n in black. Green tangent lines are drawn from the points on the parabola directly above x_{n+1} and x_n down to the x-axis. The label $y = x^2 - a$ is written in blue in the upper right quadrant.

0

x_{n+1}

x_n

$-a$