

You may have thought that because the function $f(x) = -\sqrt{x}$ does the opposite of what $f(x) = -x^2$ does, its graph would be a parabola opening up. However, this function is only defined for values of $x \geq 0$, so the graph will not have any points to the left of the y -axis. Also, there will be no positive outputs, because $-\sqrt{x}$ is defined to be the negative square root. So the graph will not have any points above the x -axis.