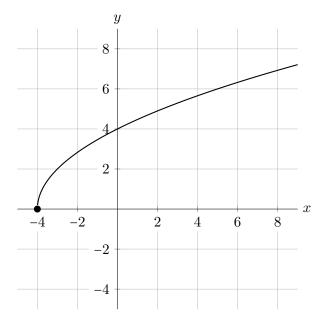
3. [5 points] Consider the function

$$g(x) = 2\sqrt{x+4}.$$

**a.** [2 points] A graph of g(x) is shown below. On the same set of axes, sketch a graph of  $g^{-1}(x)$ . Be sure your graph is clear and unambiguous, and that you have carefully plotted any important points.



**b.** [3 points] Find a formula for  $x = g^{-1}(y)$ . Show your work.

**Answer:**  $g^{-1}(y) =$ \_\_\_\_\_\_