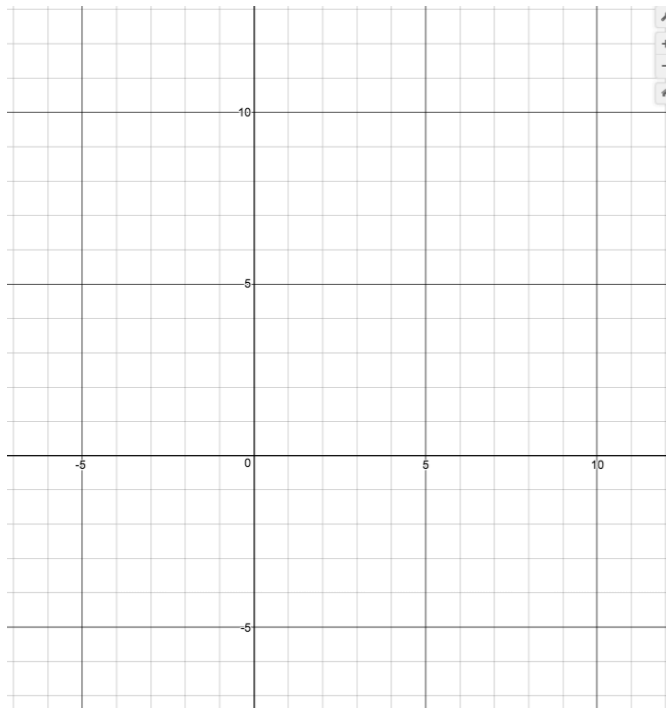# Unit 12: Inverse functions

I. Given the function:

$$f(x) = 2 - \sqrt{x + 5}$$

1. Indicate in the table a few key values for (x,y).
2. Plot the function on the axes below.
3. **Table Method:** Fill in the table below based on the table you filled for f(x).
4. Mark these points on the graph.
5. **Graph Method:** Graph the line y=x as dotted line.

$f(x)$

x (in)	y (out)

$f^{-1}(x)$

(in) x	(out) y

Algebraic method

$$f(x) = 2 - \sqrt{x + 5}$$

6. Using swapping x $\leftrightarrow$ y method, find the formula for the inverse function.