

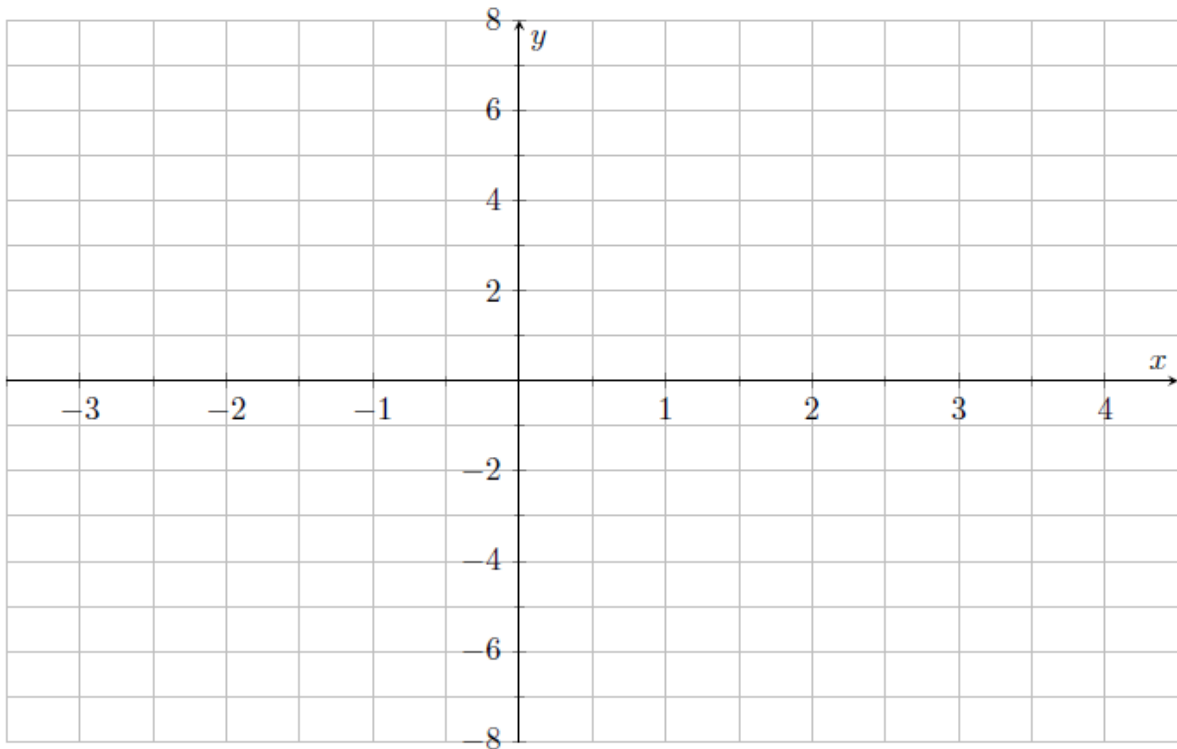
## Solving Equations Graphically

**(a)**

Plot the graph of  $y = 6 + x - x^2$ . Use the graph to find the solutions to equation

(a)  $6 + x - x^2 = 0$

(b)  $6 + x - x^2 = -6$

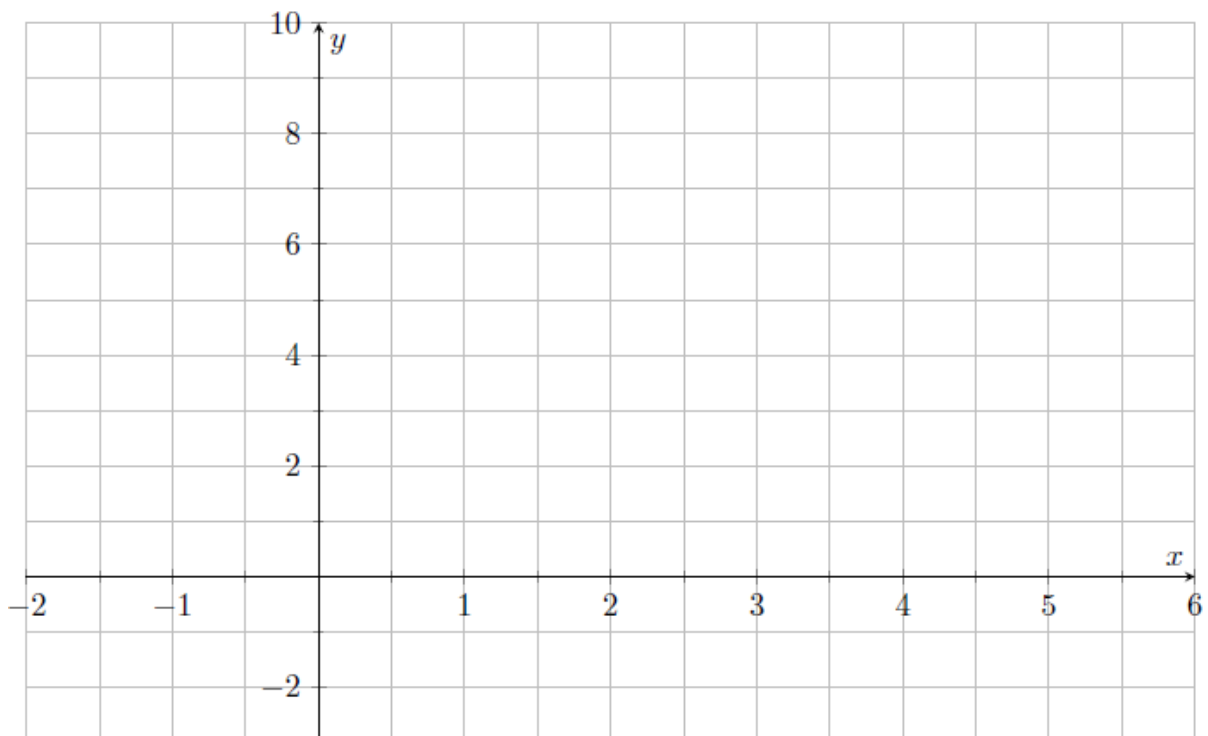


**(b)**

Plot the graph of  $y = x^2 - 4x + 3$ . Use the graph to find the solutions to equation

(a)  $x^2 - 4x + 3 = 0$

(b)  $x^2 - 4x + 3 = 8$

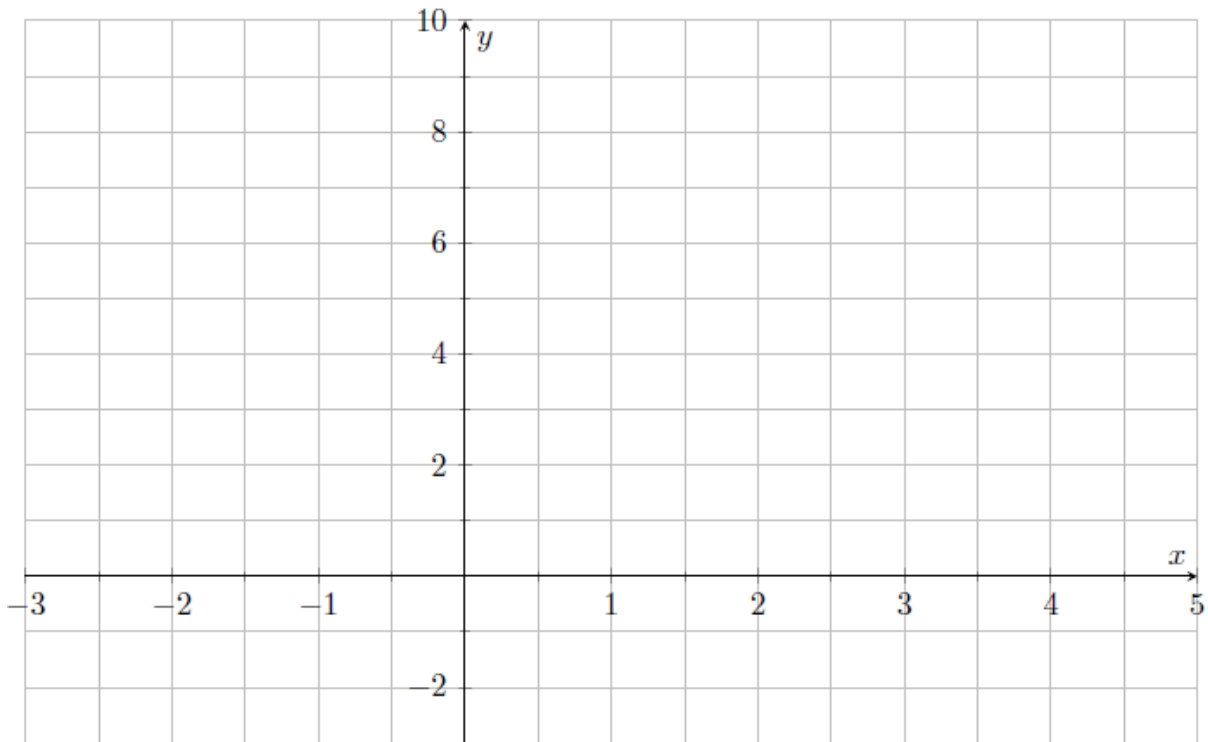


**(c)**

Plot the graph of  $y = 8 + 2x - x^2$ . Use the graph to find the solutions to the equation

(a)  $8 + 2x - x^2 = 5$

(b)  $8 + 2x - x^2 = 8 - x$



**(d)**

Plot the graph of  $y = x^3 - 3x$ . Use the graph to estimate the solutions to the equation

(a)  $x^3 - 3x = 1$

(b)  $x^3 - 3x = x + 1$

