Completing the Square (translated by WKH)

Mode Selection: The program needs to be executed in COMP mode (real numbers), so after selecting the new program location, press 1 to choose COMP mode.

Program Input Method: (41 bytes)

?→A: ?→B: ?→C: - B⌋ (2A) →X: C − A Ans² →Y:

A◢ - X◣ Y◣ X◣ Y◢

Testing Example Equations: $y = -\frac{1}{3}x^2 + 12x - 121$

Press Prog, then press $-\frac{1}{3}$ EXE -18 EXE -13.

Press EXE (displays $-\frac{1}{3}$) EXE (displays -18) EXE (displays -13).

Therefore, $y = -\frac{1}{3}(x - 18)^2 - 13$

Press EXE (displays 18) EXE (displays -13).

Therefore, the vertex point is x = 18 and y = -13.