【Translation of Graph of Quadratic Function（Convex downward）】
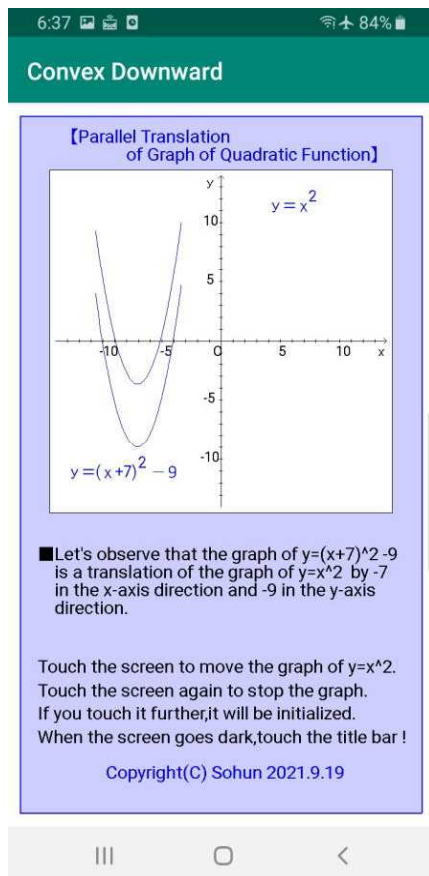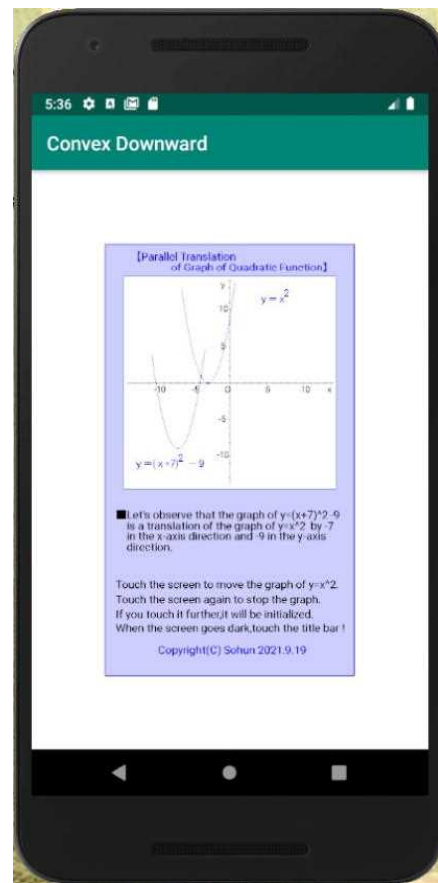
※　Observe the translation of　the graph of the quadratic function.

【Screenshot】

Galaxy S9

【Emulator image】

Android Studio Version 3.5.1

［Outline］

　Let's see that the graph of " $y = (x + 7)^2 - 9$ " is a translation of the graph of " $y = x^2$ " by -7 in the x-axis direction and -9 in the y-axis direction.

　Observe how the graph of " $y = x^2$ " moves in parallel by -7 in the x-axis direction and -9 in the y-axis direction and overlaps with the graph of " $y = (x + 7)^2 - 9$ ".

　At this time , let's note that these two graphs have the same shape and spread , but differ only in position.