1)      Solve by completing the square.

      a.      $3x^2 - 6x - 5 = 0$                                                b.      $2x^2 + 10x - 13 = 0$

2)      An object is launched at 19.6 meters per second from a 58.8 meter tall platform. The equation for the height $s$ (in meters) at time $t$ (in seconds) after launch is $s(t) = -4.9t^2 + 19.6t + 58.8$. When does the object strike the ground? What is the maximum height of the object?

3)      A garden measuring 12 meters by 16 meters is to have a sidewalk installed all around it, increasing the total area to 285 square meters. What will be the width of the pathway?