

Chapter 5 Extra Credit

① Graph the parabola with vertex at $(3, -4)$ and a point at $(-2, 5)$. Label the new point. (Must be on graph paper!)

② Write the equation of the parabola in vertex form. There is a point on the parabola $Q(3, -7)$ and the vertex is at $P(5, 1)$.

③ Write the equation in vertex form.
 $y = 2x^2 + 9x - 5$

④ Find the y -intercept.

$$y = 3(x-2)^2 + 4$$

⑤ Factor. $3x^2 - 12x$

⑥ Factor. $49 - 36x^2$

⑦ Factor. $6x^2 + 13x - 5$

⑧ p. 845 # 68