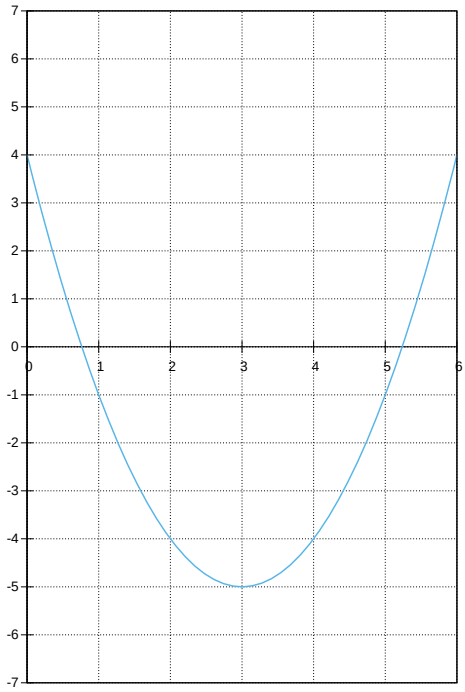
練習問題 16Extra　解答

問題 1　次の 2 次関数の頂点の座標を求め、グラフを描け。

(1) $y = x^2 - 6x + 4$

$= (x-3)^2 + 5$

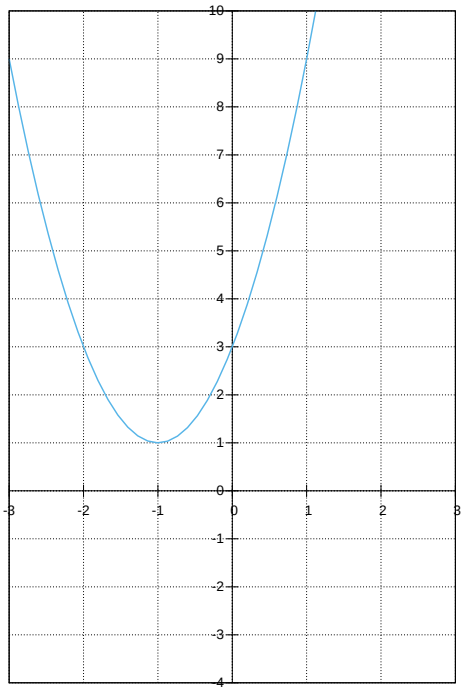
頂点 $(3,\ -5)$



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

$= 2(x+1)^2 + 1$

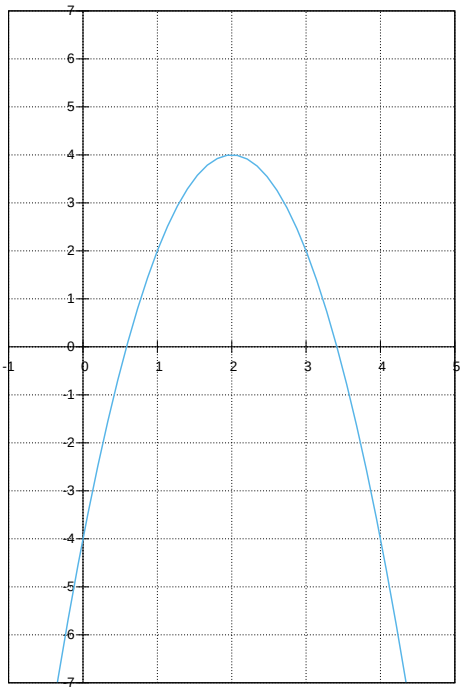
頂点 $(-1,\ 1)$



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

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

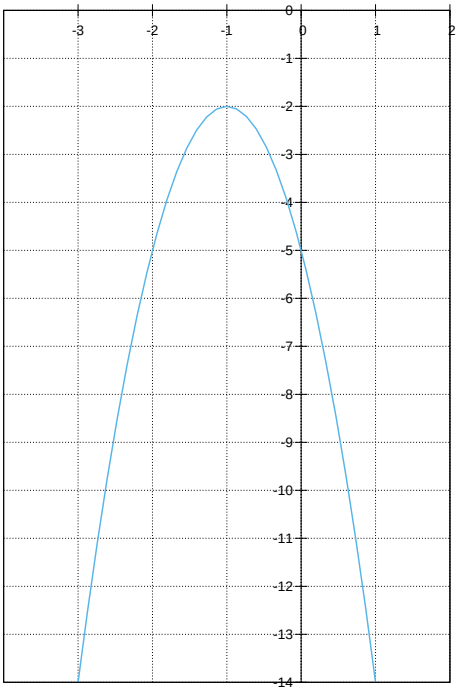
頂点 $(2,\ 4)$



(4) $y = -3x^2 - 6x - 5$

$= -3(x+1)^2 - 2$

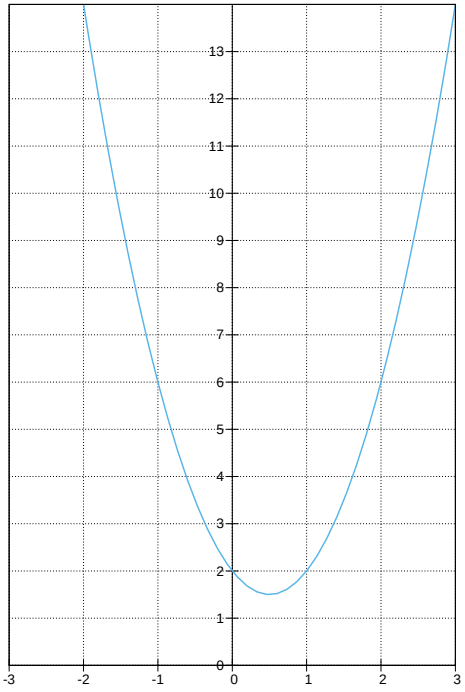
頂点 $(-1,\ -2)$



(5) $y = 2x^2 - 2x + 2$

$= 2\left(x^2 - \dfrac{1}{2}\right)^2 + \dfrac{3}{2}$

頂点 $\left(\dfrac{1}{2},\ \dfrac{3}{2}\right)$



(6) $y = -\dfrac{1}{2}x^2 - 3x$

$= -\dfrac{1}{2}(x+3)^2 - \dfrac{9}{2}$

頂点 $\left(-3,\ \dfrac{9}{2}\right)$