

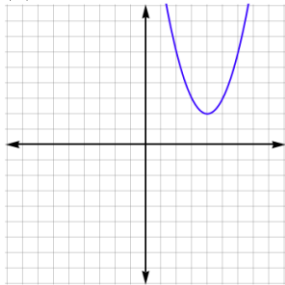
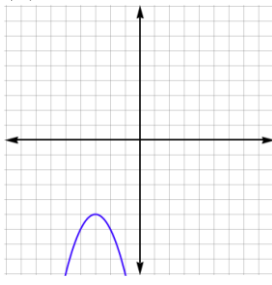
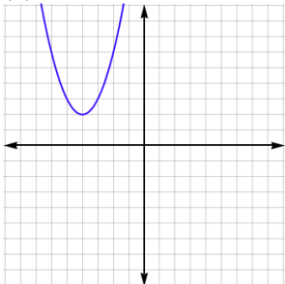
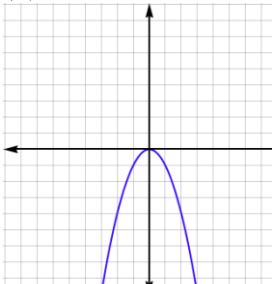
PROBLEM SET – Vertex Form, Mr. Peralta, Class 821 and 829

Important Problems

1. Find the **vertex** and then write the **vertex form**.

(a) $y = x^2 + 4x - 16$ Vertex: Vertex Form:	(b) $y = x^2 + 18x - 307$ Vertex: Vertex Form:
(c) $y = x^2 + 6x - 7$ Vertex: Vertex Form:	(d) $y = x^2 + 2x - 28$ Vertex: Vertex Form:

2. Draw a dot on the vertex and then write the equation of the parabola in **vertex form**

(a)  Vertex Form:	(b)  Vertex Form:
(c)  Vertex Form:	(d)  Vertex Form:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

3. Find the **roots** and then write the **factored form**.

(a) $y = x^2 + 4x - 16$ Roots: Factored Form:	(b) $y = x^2 + 18x - 307$ Roots: Factored Form:
(c) $y = x^2 + 6x - 7$ Roots: Factored Form:	(d) $y = x^2 + 2x - 28$ Roots: Factored Form:

Extension: Pg. 272 (#25 - #30) of the workbook