

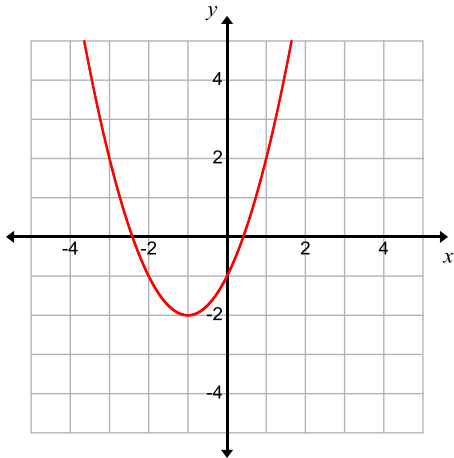
Graphing Quadratic Relations

Name: **Teacher Solutions**

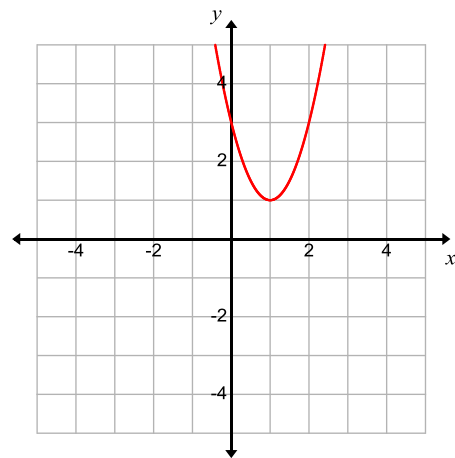
Sketch each of the following quadratic relations.

Identify the intercepts, axis of symmetry and vertex for each.

(a) $y = (x+1)^2 - 2$

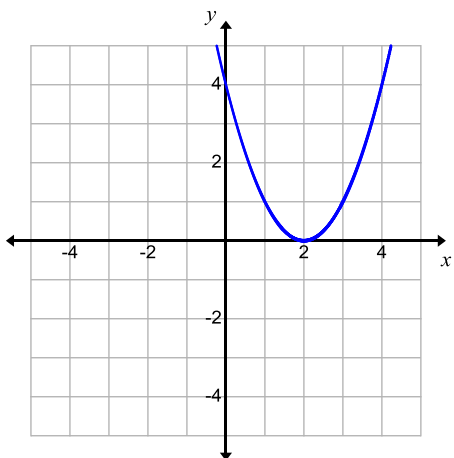


(b) $y = 2(x-1)^2 + 1$



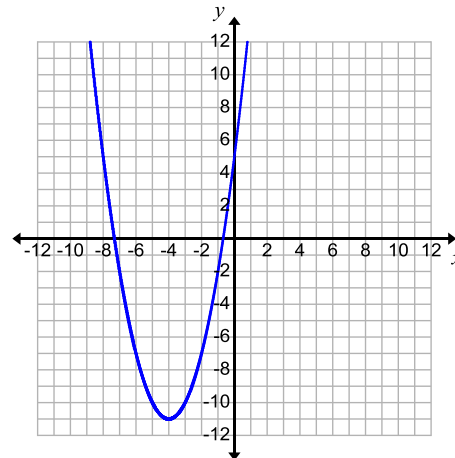
(c) $y = x^2 - 4x + 4$

Answer: $y = (x-2)^2$



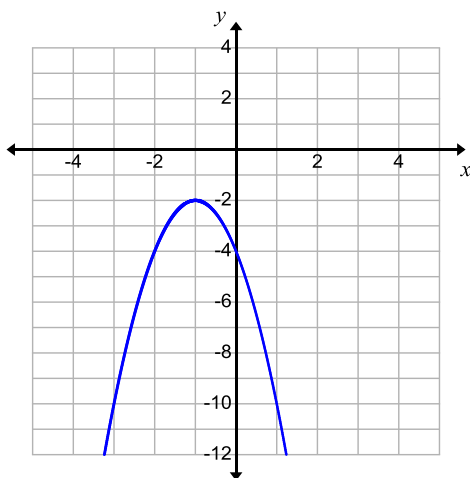
(d) $y = x^2 + 8x + 5$

Answer: $y = (x+4)^2 - 11$



(e) $y = -2x^2 - 4x - 4$

Answer: $y = -2(x+1)^2 - 2$



(f) $y = 4x^2 + 4x + \frac{1}{2}$

Answer: $y = 4\left(x + \frac{1}{2}\right)^2 - \frac{1}{2}$

