Graphing Parabolas, General Form

$$y = ax^2 + bx + c$$

Algorithm

1. Find the vertex, (–b/2a, sub)
2. Pick a convenient x to find another point
3. Use symmetry to find third point

Graph the following

1. $y = x^2 + 6x - 1$
2. $y = x^2 - 4x + 7$
3. $y = x^2 + 2x + 3$
4. $y = -x^2 + 8x - 3$
5. $y = 6x2 - 12x + 1$
6. $y = -2x^2 + 8x - 3$
7. $y = 3x^2 - 6x - 9$
8. $y = -5x^2 + 10x + 1$
9. $y = x^2 - 4$
10. $y = -2x^2 - 4x + 1$