Graphing Quadratics by finding the Vertex, Convenient Points and Symmetry

1. Find the vertex letting $x=-b / 2 a$ to find the $y$-coordinate
2. Pick a convenient point, 0 if possible, to find a second point
3. Use symmetry to find $3^{\text {rd }}$ point
4. Sketch the graph

Graph: $y=2 x^{2}-4 x+5$

