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| 1) Write the equation of a parabola that has a  vertex (5, -3) and contains the point (9, 5). | 2) Write the equation of a parabola that has a vertex  (-2, 6) and contains the point (4, -3). |
| 3) Write the equation of a parabola that has  vertex of (-5, 0) and contains the point (-4, -3). | 4) Write the equation of a parabola that has vertex  (6, -7) and has the point (3, 2). |
| **Find the equation of the quadratic function that contains the vertex (1, -3) and the point (2, 0).** y=a(x−h)2+k |
| 1. Plug in the vertex. |  |
| 2. Plug in x & y coordinates of the point given. |  |
| 3. Solve for "a." |  |
| 4. Now substitute the value of **a** and the coordinates of the vertex into the vertex form to write the equation. |  |
| 5. Check your answer by putting the equation into a graphing calculator. |  |

Try this: Write the equation for the parabola with vertex (0, -3) and the point (1, 1). **Follow steps 1-5 above!**