**Quadratic Sort**

Match each equation of a quadratic with a graph and a description of the transformation. Glue in groups of three onto a sheet of notebook paper.

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| **A** | **I**$$y=-2\left(x+3\right)^{2}+4$$ | **Q**Reflected over the x-axis, vertical dilation of 2 and translated left 3 and up 4. |
| **B** | **J**$$y=2\left(x-1\right)^{2}-1$$ | **R**Reflected over the x-axis and translated right 2 and down 4 |
| **C** | **K**$$y=-5\left(x-1\right)^{2}+1$$ | **S**Reflected over the x-axis, vertical dilation of 5 and translated right 1 and up 1. |
|  **D** | **L**$$y=\left(\frac{x-1}{2}\right)^{2}$$ | **T**Horizontal dilation of 2 and translated right 1 |
| **E** | **M**$$y=\left(\frac{x-4}{2}\right)^{2}+2$$ | **U**Vertical dilation of 2 and translated right 1 and down 1 |
| **F** | **N**$$y=3\left(x+3\right)^{2}-4$$ | **V**Horizontal dilation of 2 and translated right 4 and up 2. |
| **G** | **O**$$y=-\left(x-2\right)^{2}-4$$ | **W**Vertical dilation of 3 and translated left 3 and down 4. |
| **H** | **P**$$y=\left(x+1\right)^{2}+2$$ | **X**Translated left 1 and up 2. |