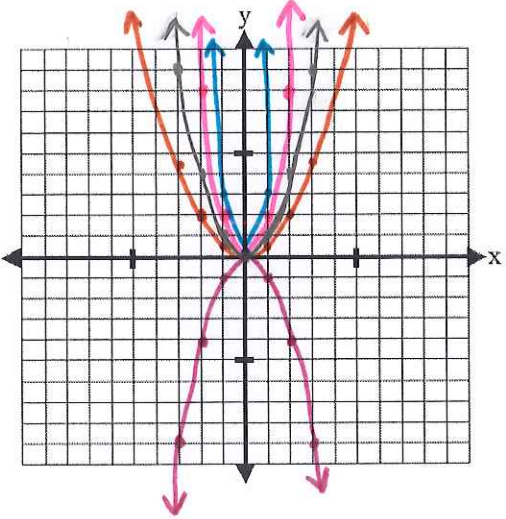


Name: Key

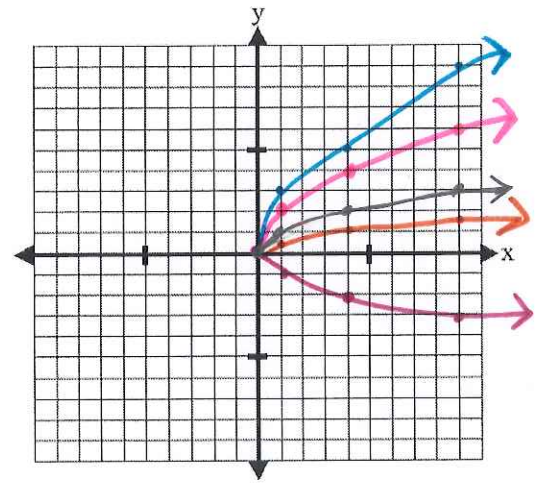
Date: \_\_\_\_\_

### How an 'a' value effects the graph

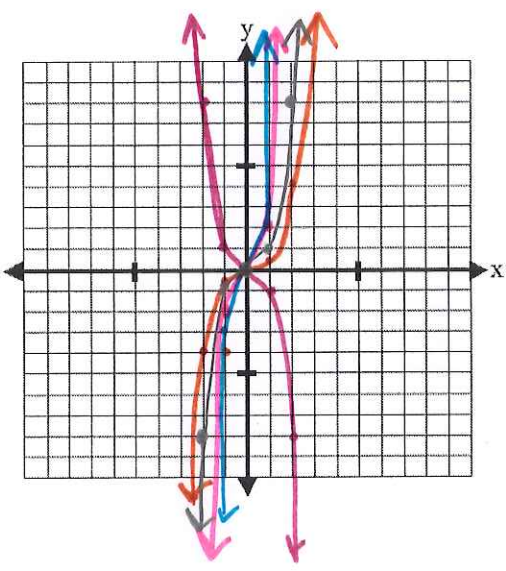
- $y = x^2$
- $y = -x^2$
- $y = 2x^2$
- $y = \frac{1}{2}x^2$
- $y = 3x^2$



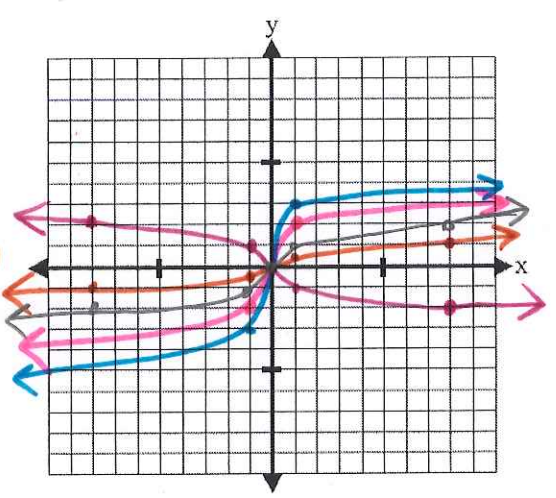
- $y = \sqrt{x}$
- $y = -\sqrt{x}$
- $y = 2\sqrt{x}$
- $y = \frac{1}{2}\sqrt{x}$
- $y = 3\sqrt{x}$



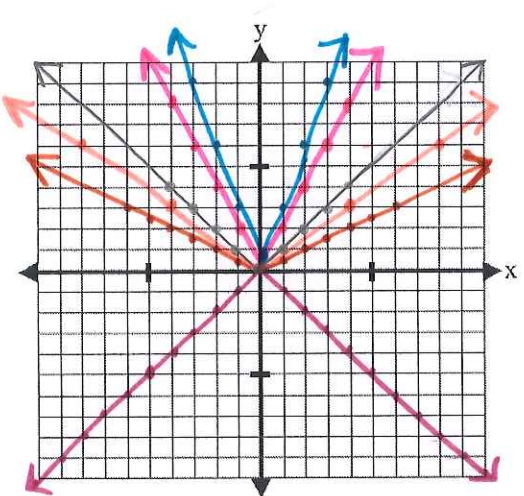
- $y = x^3$
- $y = -x^3$
- $y = 2x^3$
- $y = \frac{1}{2}x^3$
- $y = 3x^3$



- $y = \sqrt[3]{x}$
- $y = -\sqrt[3]{x}$
- $y = 2\sqrt[3]{x}$
- $y = \frac{1}{2}\sqrt[3]{x}$
- $y = 3\sqrt[3]{x}$

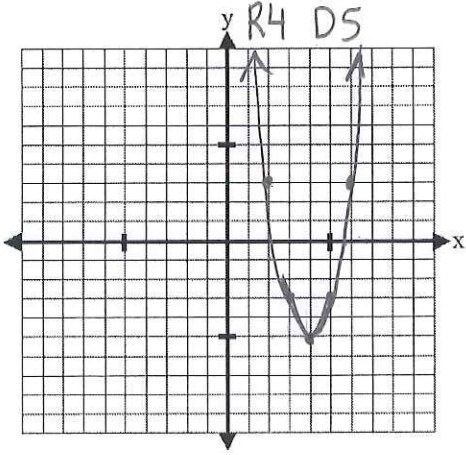


- $y = |x|$
- $y = -|x|$
- $y = 2|x|$
- $y = \frac{1}{2}|x|$
- $y = 3|x|$
- $y = \frac{3}{4}|x|$

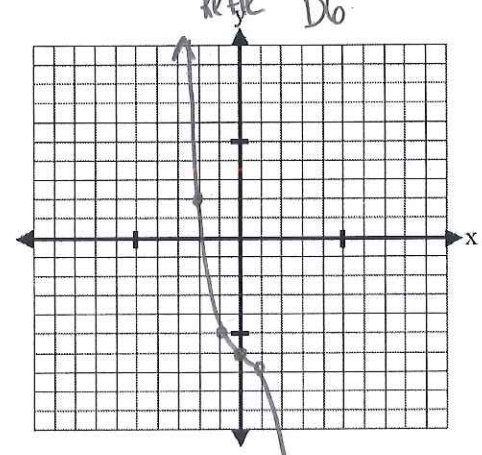


Graph each of the following using transformations and graphing patterns. No Calculator.

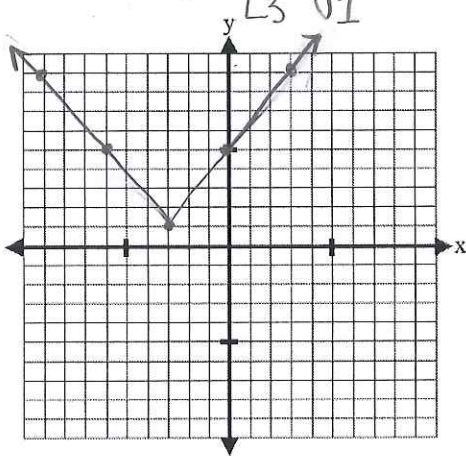
$$y = 2(x - 4)^2 - 5$$



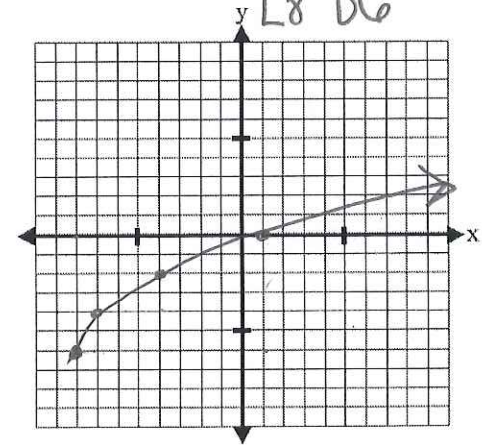
$$y = -x^3 - 6$$



$$y = \frac{4}{3}|x + 3| + 1$$



$$y = 2\sqrt{x + 8} - 6$$



$$y = \sqrt[3]{x - 5} + 2$$

