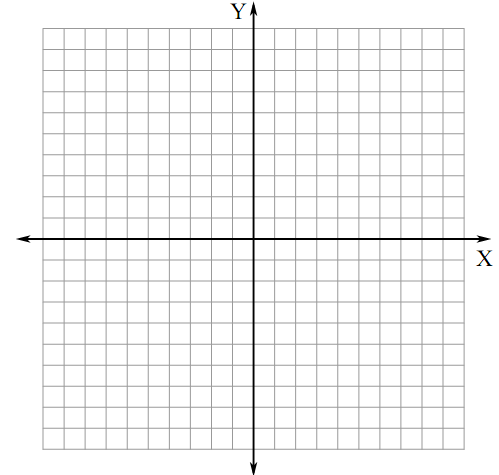
**4.3 PLAYING WITH**  Name: Blk:

* Graph using



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Notice:

* Vertex
* Graph opens
* Manipulation #1:

Use a graphing calculator to graph the following functions. Sketch each of the graphs in the space provided.

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |

Notice: moves the graph

* The graph of is the image of after a of units
* Manipulation #2:

Use a graphing calculator to graph the following functions. Sketch each of the graphs in the space provided.

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |

Notice: moves the graph

* The graph of is the image of after a of units
* moves the graph
* moves the graph
* Manipulation #3:

Use a graphing calculator to graph the following functions. Sketch each of the graphs in the space provided.

|  |  |
| --- | --- |
|  |  |
|  |  |

Notice:

* = graph opens
* = graph opens
* =
* =
* The graph of is the image of after the following transformations:

when =

when =

when =

when =