

Name: _____

Date: _____

Graphing Family of Functions

Linear Function

"Mother Function"

$$y = x$$

-2 |

Name:

Name:

Date:

Move onto filling out the graphing family of functions handout for a parabola.

Do everything you did for the line adding the following specifically for a parabola:

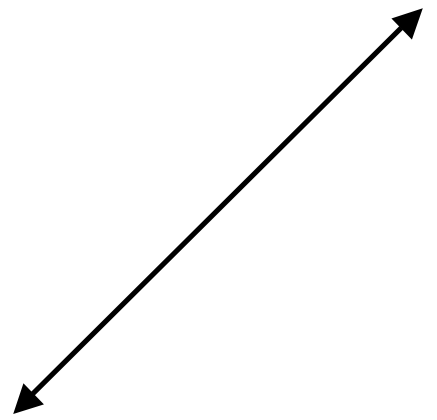
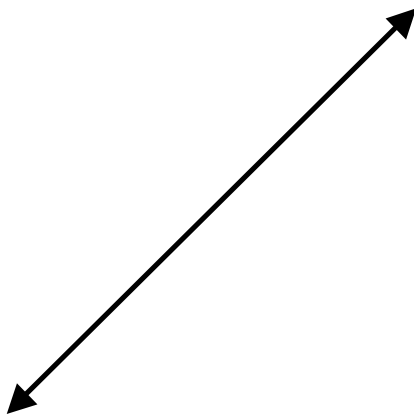
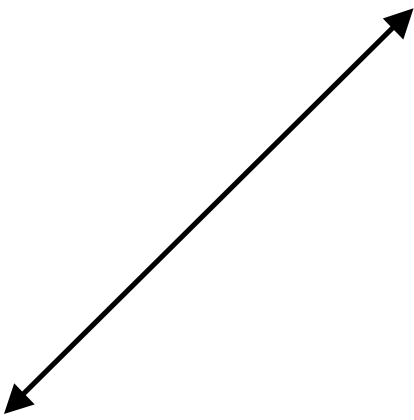
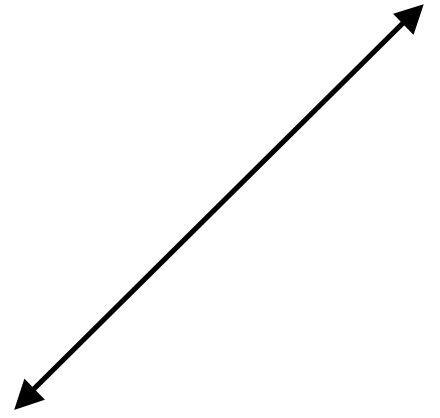
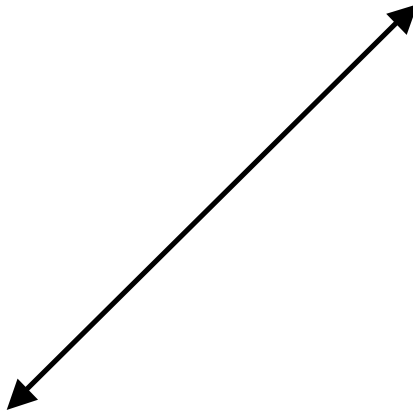
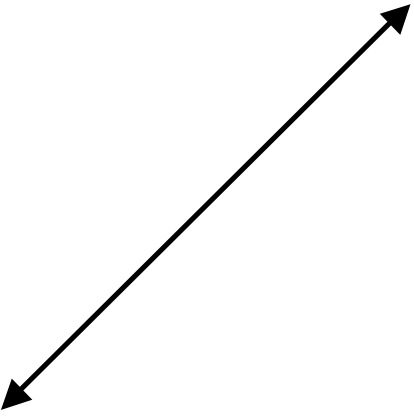
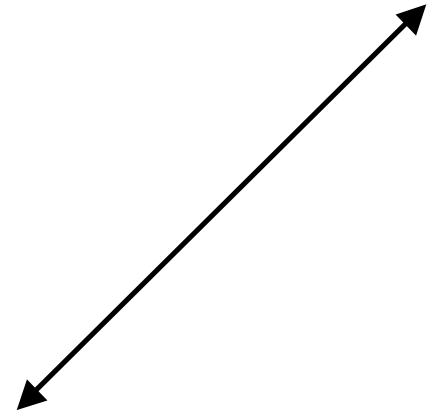
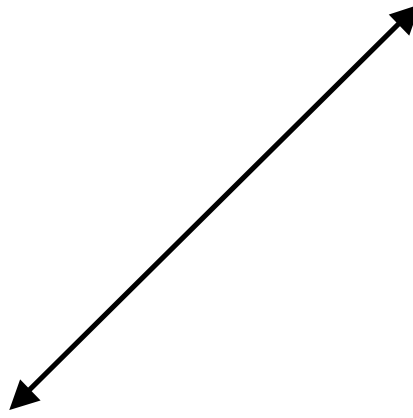
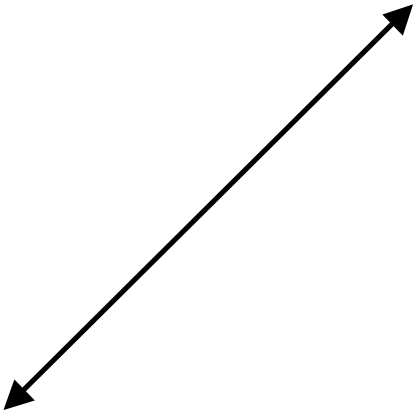
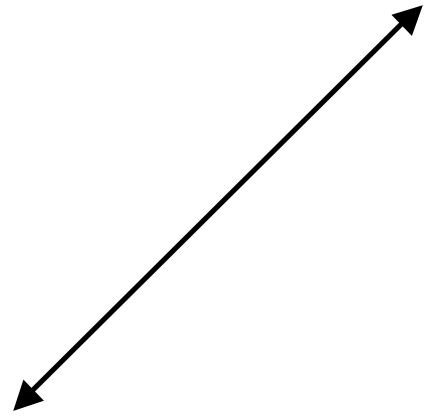
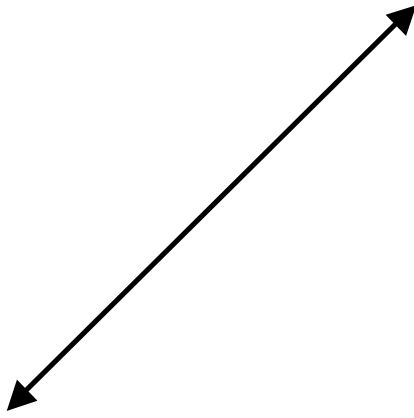
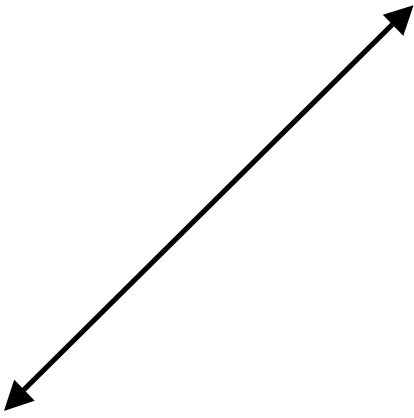
- Discuss the relationship between x and y that is the x value times itself or squared. This will explain the positive answers. Then explain the negative values for the y because of the negative sign.
- Show how the y values in the table match up because of the squared in the equation. Also, show how the x values match up in the graph making it symmetric or a reflection over the y -axis. You can use the overhead of the parabola to show the reflection.

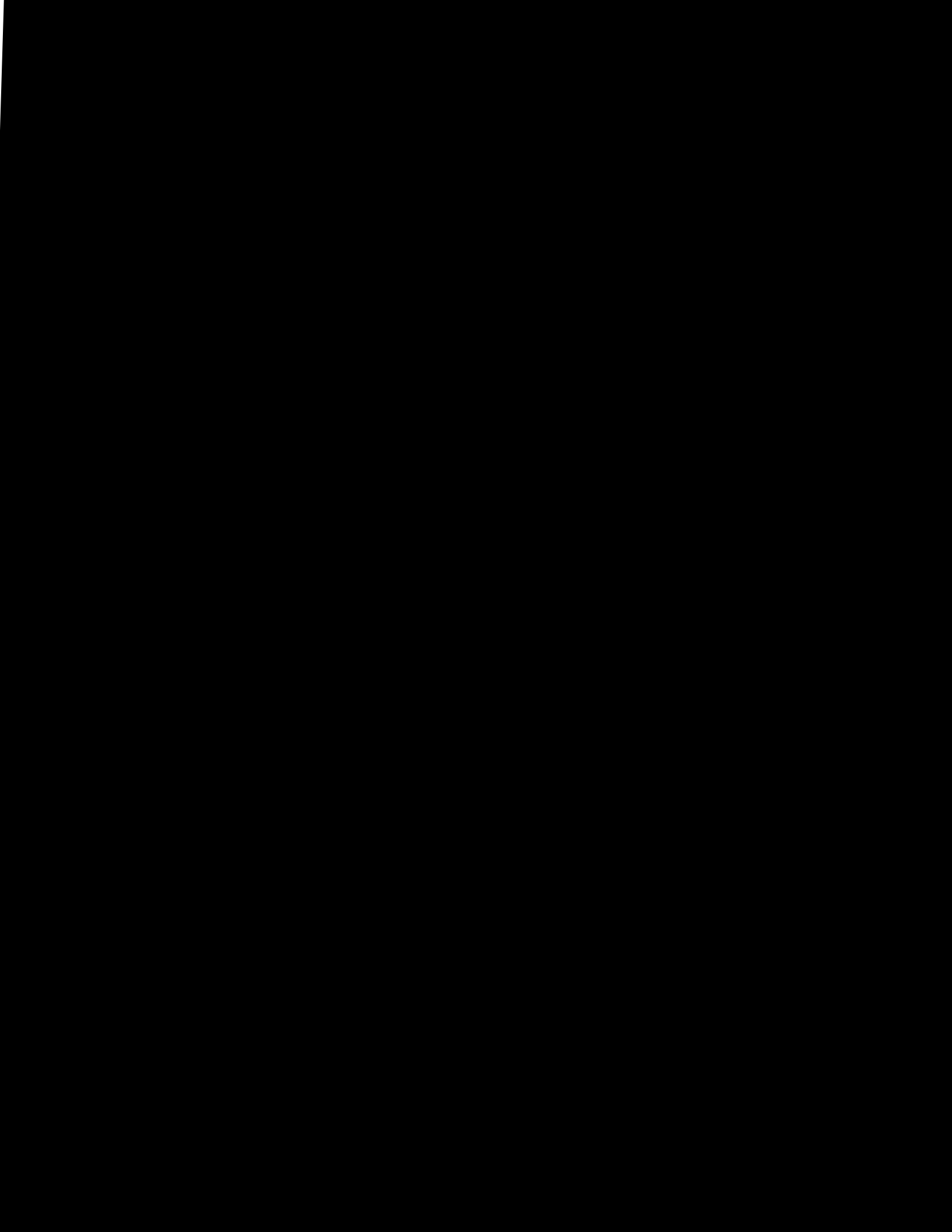
Move onto filling out the graphing family of functions handout for a cubic.

Do everything you did for the line adding the following specifically for a cubic:

- Discuss the relationship between x and y that is the x value times itself 3 times or cubed.
- Show how the y values in the table do not match up like before because of the cubed in the equation. Also, show the differences of the graph of a cubic to a parabola. You can use the overhead of the parabola and cubic to help.

The 4th page of graphs can be used to show students a change in slope for linear functions or horizontal shifts for quadratics and cubic's.

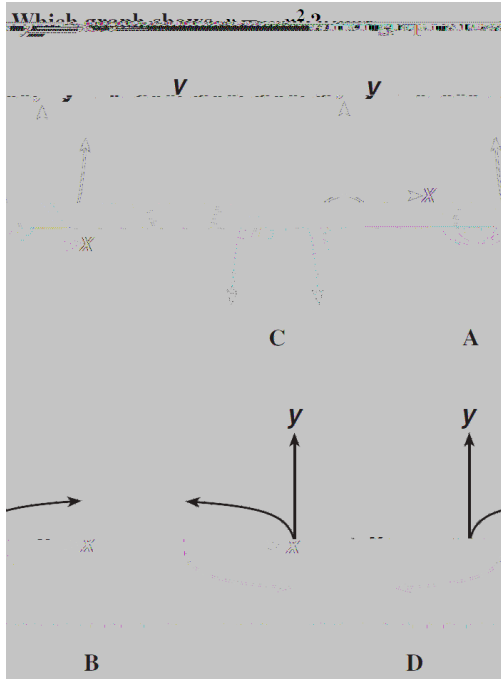




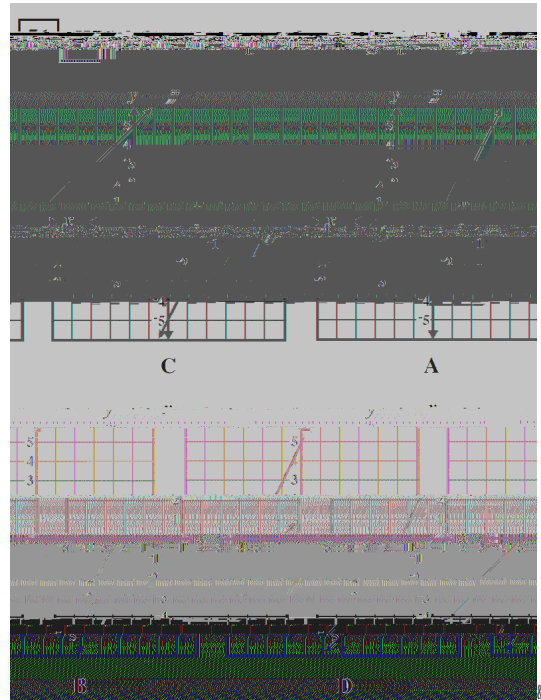
Warm - Up

" # \$ % ! * ! +) & ! , \$ # - . ! &

! " # \$ % ! * ! +) & ! , \$ # - . ! & ' " # \$ % ! * ! +) & ! , \$ # - . &

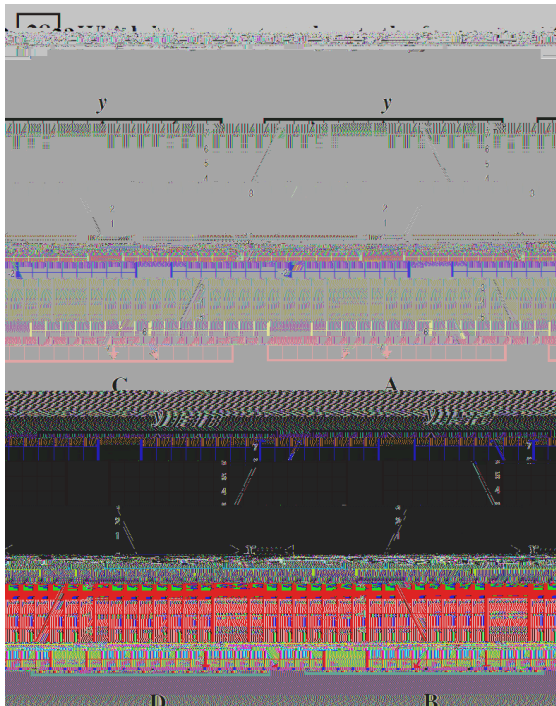


+ / 0 ! (' !

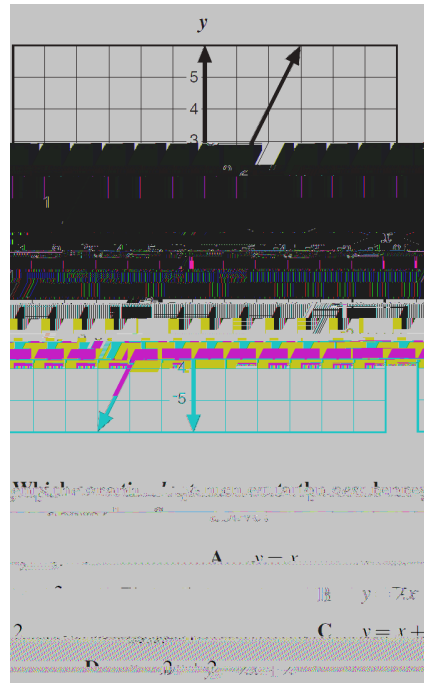


() * & + ' + &

+ " # \$ % ! * ! / 2 , . 3 \$ # & , " # \$ % ! * ! / 2 , . 3 \$ # &



/ 4 5 ! 6 ! 7 !

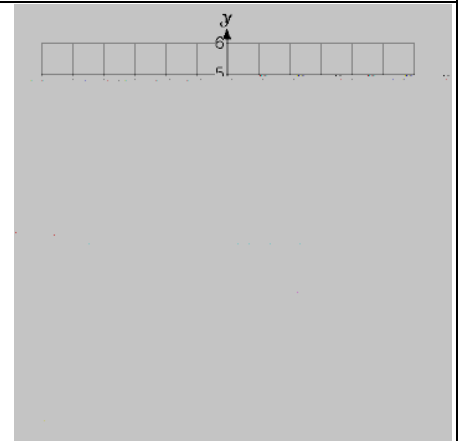
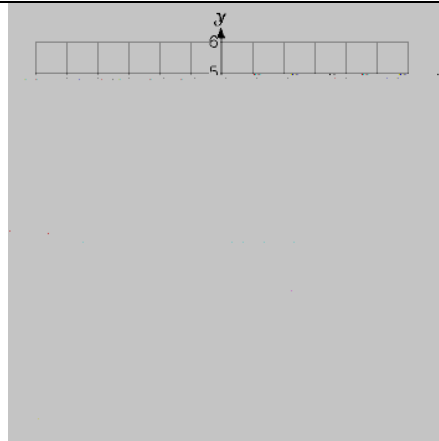
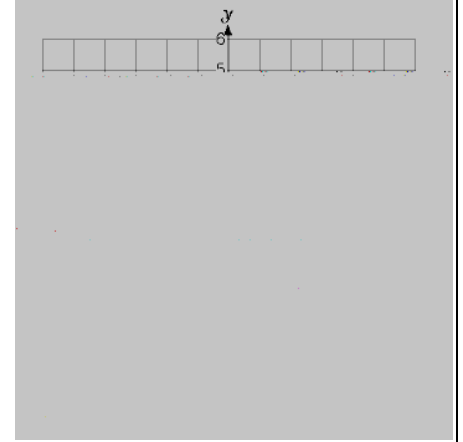
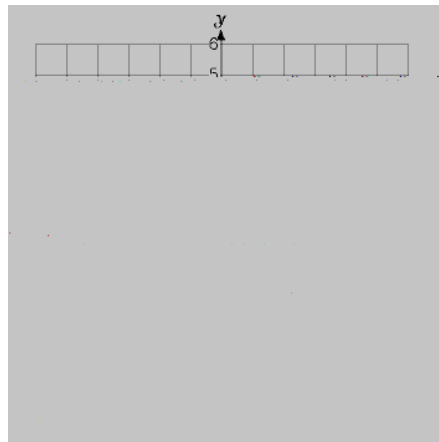


/ 4 5 ! 6 ! 7 !

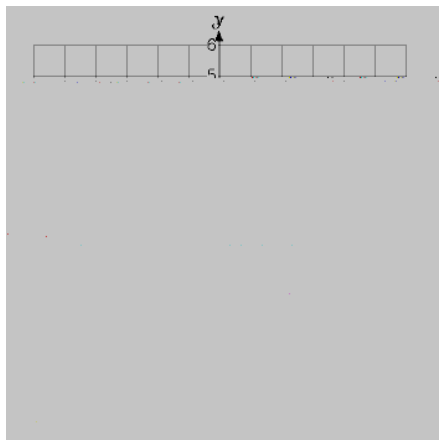
Name: _____

Date: _____

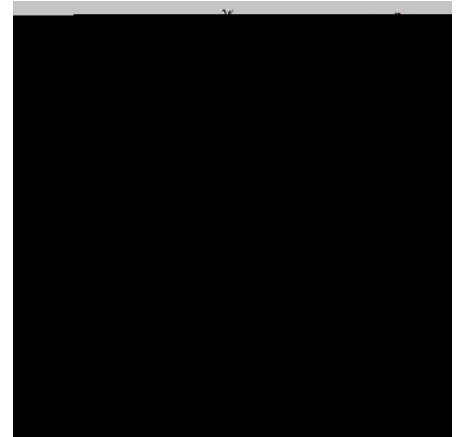
Graphing Family of Functions



You Try:



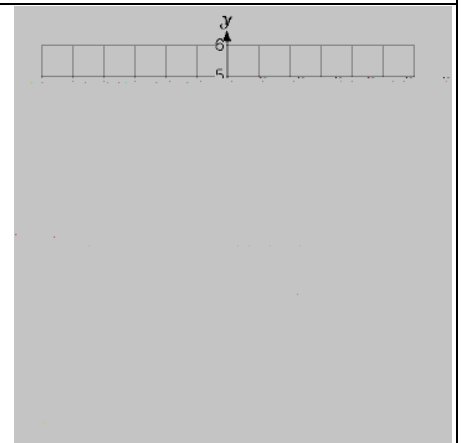
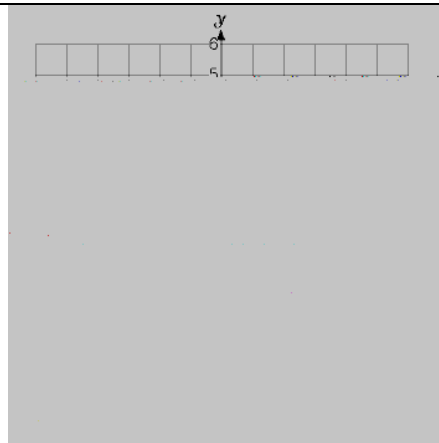
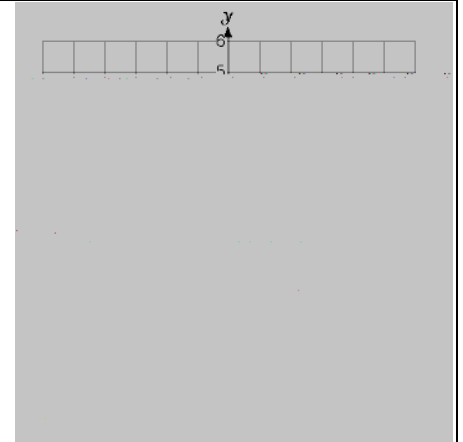
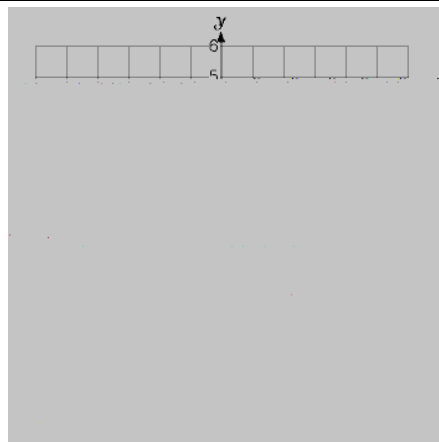
You Try:



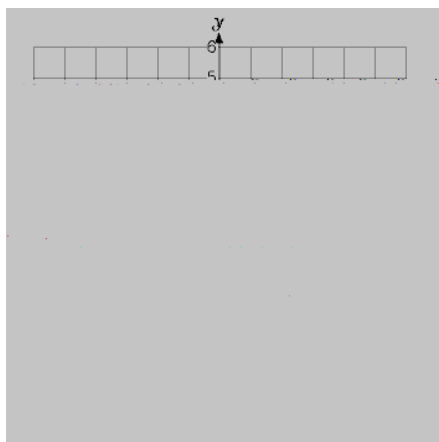
Name: _____

Date: _____

Graphing Family of Functions



You Try:

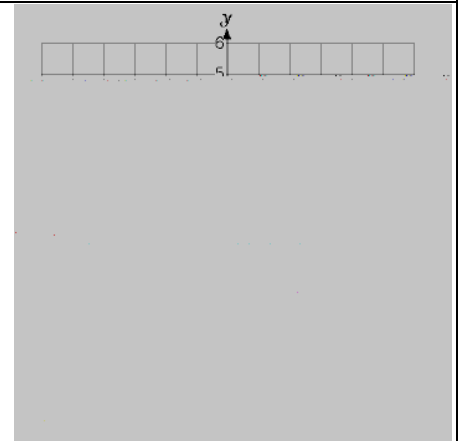
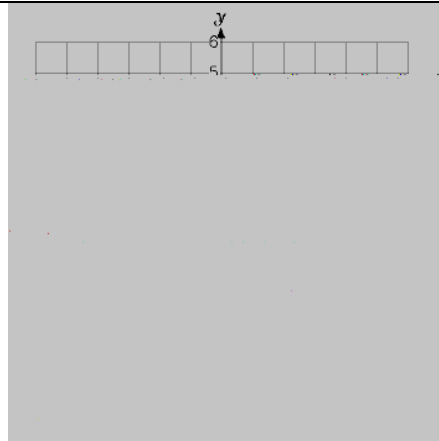
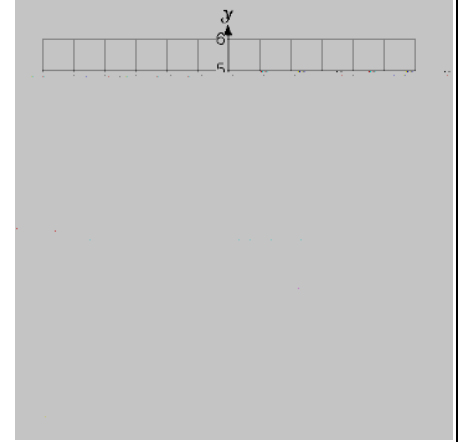
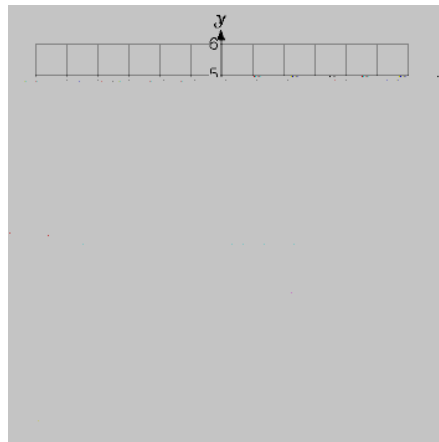


You Try:

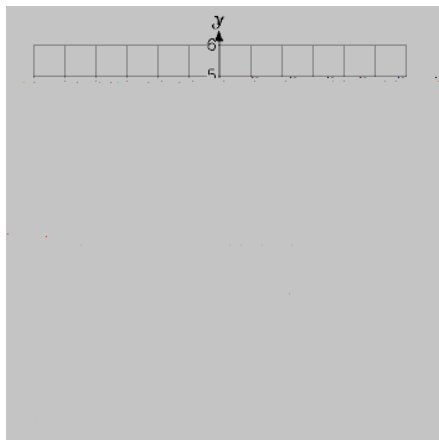
Name: _____

Date: _____

Graphing Family of Functions



You Try:



You Try:

