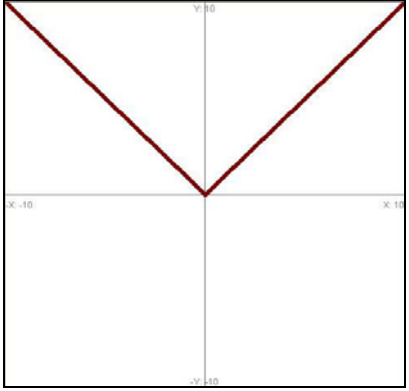
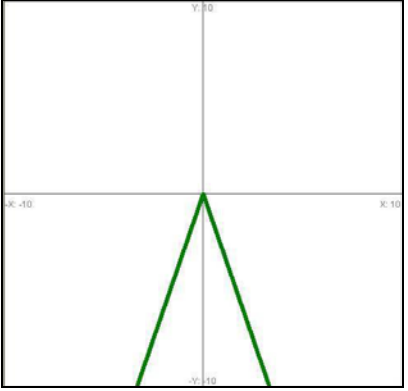


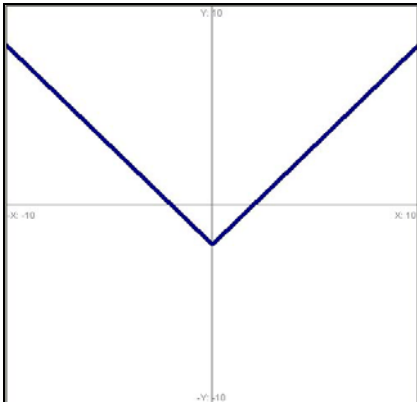
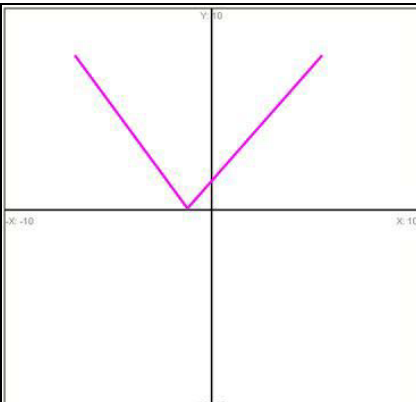
A Selection of Reciprocal Functions

[Discussion of Absolute Value from Purple Math!](#) Review **both** pages for Absolute Value!

@ Review discussion of Absolute Value Function & Investigate AV Characteristics below! @

@ What can you conclude about characteristics from discussion and sample graphs? @

y or $f(x) = x$ * $-10 < x \& y < +10$	Verify GC by Table!	y or $f(x) = -3 x$ * $-10 < x \& y < +10$																								
Quadrants: (+x,+y) or (-x, +y)		Quadrants: (-x,-y) or (+x, -y)																								
Compare to $y = x$!		Note Direction & Size!																								
	<table style="margin: auto;"> <tr><td>X</td><td>Y</td></tr> <tr><td>0</td><td>0</td></tr> <tr><td>+1</td><td>+1</td></tr> <tr><td>+2</td><td>+2</td></tr> <tr><td>-1</td><td>+1</td></tr> <tr><td>-2</td><td>+2</td></tr> <tr><td>X</td><td>Y</td></tr> <tr><td>0</td><td>0</td></tr> <tr><td>+1</td><td>-3</td></tr> <tr><td>+2</td><td>-6</td></tr> <tr><td>-1</td><td>-3</td></tr> <tr><td>-2</td><td>-6</td></tr> </table>	X	Y	0	0	+1	+1	+2	+2	-1	+1	-2	+2	X	Y	0	0	+1	-3	+2	-6	-1	-3	-2	-6	
X	Y																									
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+1	+1																									
+2	+2																									
-1	+1																									
-2	+2																									
X	Y																									
0	0																									
+1	-3																									
+2	-6																									
-1	-3																									
-2	-6																									

$f(x) = x - 2$ * $-10 < x \& y < +10$	Verify GC by Table!	$f(x) = x + 1$ * $-10 < x \& y < +10$																								
How does outside (-) affect?		How does inside (+) affect?																								
Note: Position & Shift!		Note: Position & Shift!																								
	<table style="margin: auto;"> <tr><td>X</td><td>Y</td></tr> <tr><td>0</td><td>-2</td></tr> <tr><td>-1</td><td>-1</td></tr> <tr><td>+1</td><td>-1</td></tr> <tr><td>-3</td><td>+1</td></tr> <tr><td>+3</td><td>+1</td></tr> <tr><td>X</td><td>Y</td></tr> <tr><td>-1</td><td>0</td></tr> <tr><td>0</td><td>+1</td></tr> <tr><td>-2</td><td>+1</td></tr> <tr><td>-5</td><td>+4</td></tr> <tr><td>+3</td><td>+4</td></tr> </table>	X	Y	0	-2	-1	-1	+1	-1	-3	+1	+3	+1	X	Y	-1	0	0	+1	-2	+1	-5	+4	+3	+4	
X	Y																									
0	-2																									
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X	Y																									
-1	0																									
0	+1																									
-2	+1																									
-5	+4																									
+3	+4																									

What does (+) or (-) in front of | | do? What does a (\pm) Constant in front of | | do?
 What does a (+ or -) do outside the | |? What does a (+) or (-) do inside the | |?