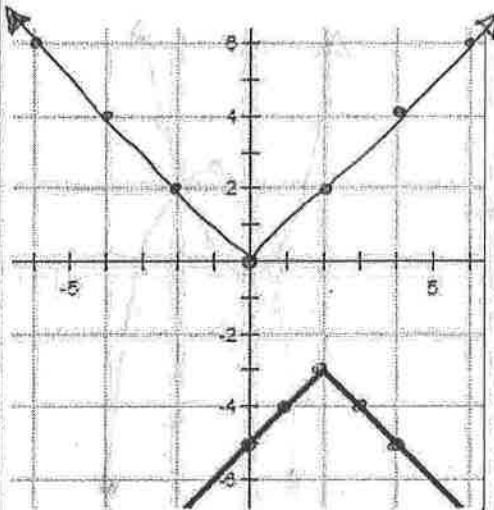
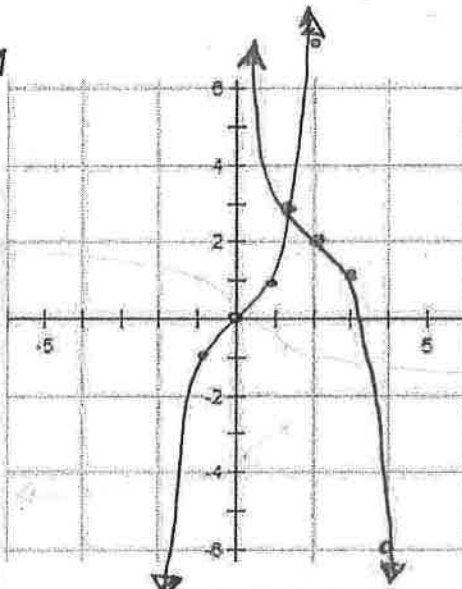


Directions: Given following information about the function, state the equation and description of the graph. Finally, write a description of the linear transformation that has taken place.



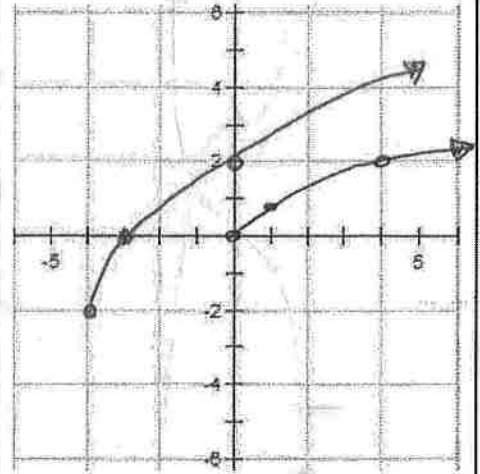
Equation: $y = -|x-2| - 3$

Description: Reflection over
x-axis
Horiz. Shift right 2
Vertical Shift down 3
 * Absolute Value Fcn.



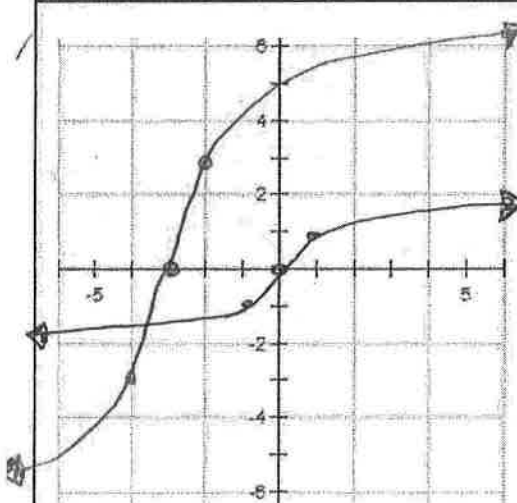
Equation: $f(x) = -(x-2)^3 + 2$

Description: Reflection over
x-axis / Horiz. Shift
right 2, Vertical Shift
up 2
 * Cubic Function



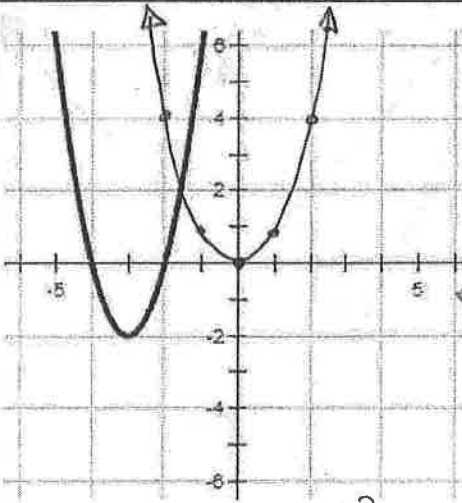
Equation: $y = 2\sqrt{x+4} - 2$

Description:
 • A Square Root Function
 • Vertical Stretch by 2
 • Horizontal Shift left 4 units
 • Vertical Shift down 2 units



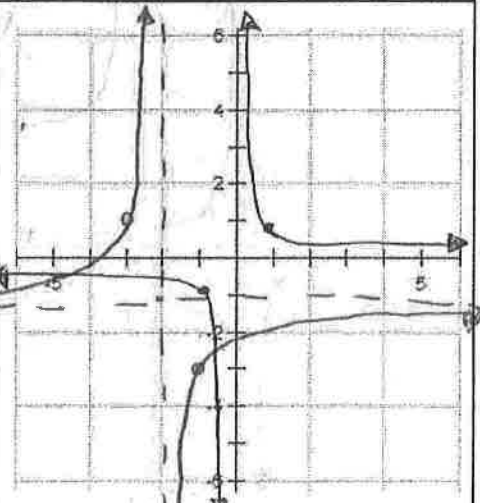
Equation: $y = 3\sqrt[3]{x+3}$

Description:
 • A Cube Root function
 • Vertical Stretch by 3
 • Horizontal Shift left 3 units



Equation: $y = 2(x+3)^2 - 2$

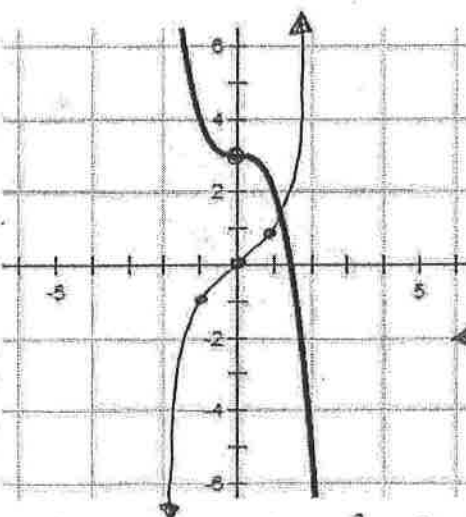
Description: Quadratic Funct.
Vert. Stretch by 2
Horizontal Shift left 3
Vert. Shift down 2



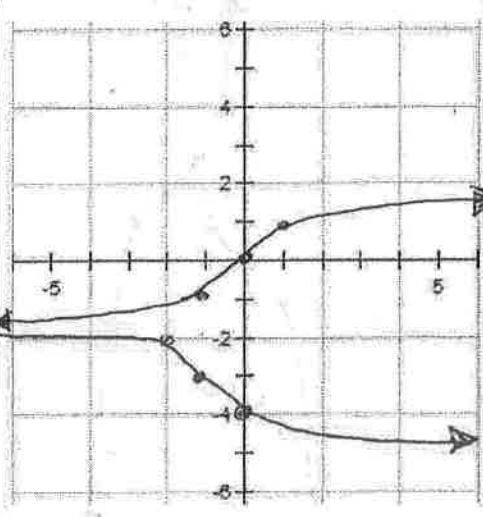
Equation: $f(x) = -2(x+2)^{-1} - 1$

Description: Reciprocal Function
Reflection over x-axis, Vert. Stretch
by 2, Horizontal Shift Left 2,
Vertical Shift down 1

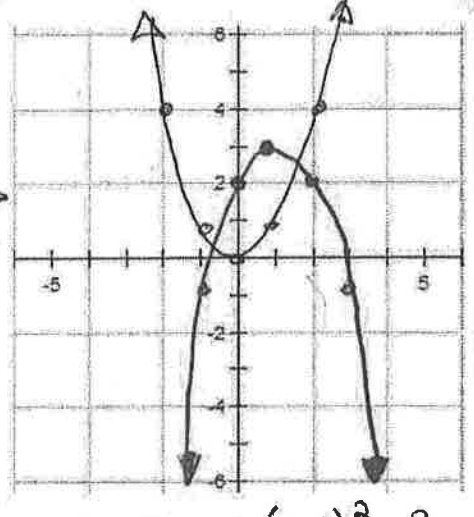
Directions: Given following information about the function, state the equation and description of the graph. Finally, write a description of the linear transformation that has taken place.



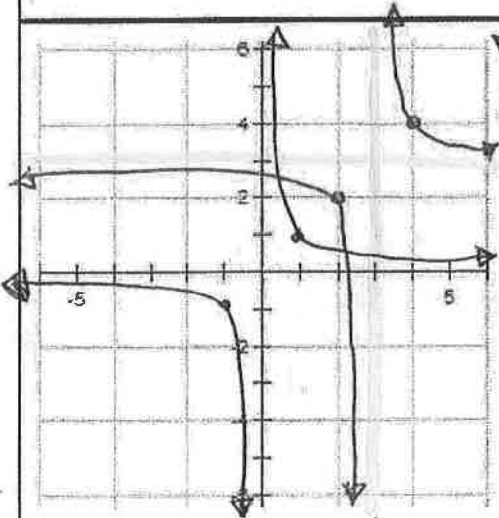
Equation: $y = -(x)^3 + 3$
 Description: *Cubic Function
 Reflection over x-axis
 Vertical Shift up 3



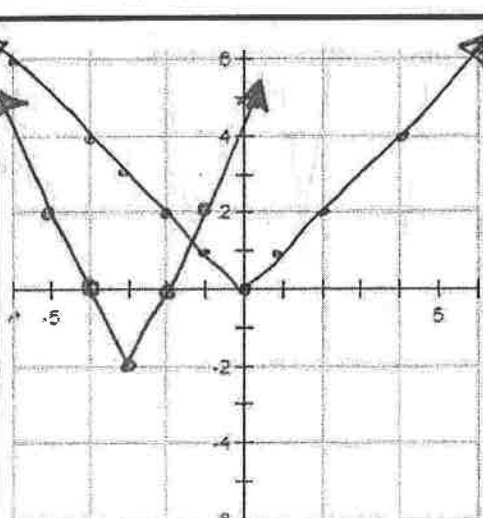
Equation: $f(x) = -\sqrt[3]{x+1} - 3$
 Description: *Cube Root Function
 Reflection over x-axis
 Horizontal Shift left 1
 Vertical Shift down 3



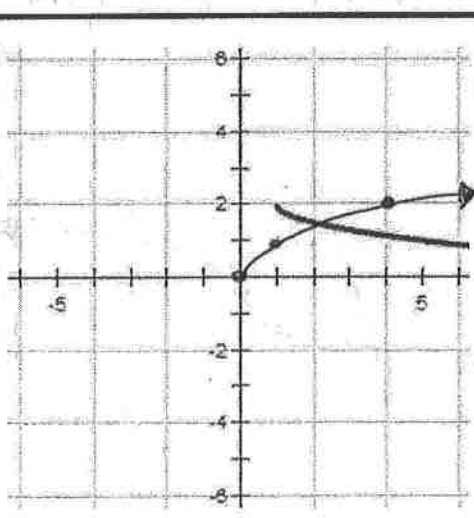
Equation: $y = -(x-1)^2 + 3$
 Description:
 • A quadratic function
 • Reflection Over the x-axis
 • Horizontal Shift right 1 unit
 • Vertical Shift up 3 units



Equation: $y = (x-3)^{-1} + 3$
 Description:
 • A Reciprocal Function
 • Horizontal Shift right 3 units
 • Vertical Shift up 3 units



Equation: $f(x) = 2|x+3| - 2$
 Description: *Absolute Value Function, Vertical Stretch by 2,
 Horizontal Shift left 3,
 Vertical Shift down 2



Equation: $y = \frac{1}{2}\sqrt{x-1} + 2$
 Description: *Square Root
 Reflection over x-axis
 Horizontal Shift Right 1
 Vertical Shift Up 2
 * Vertical Shrink by $\frac{1}{2}$