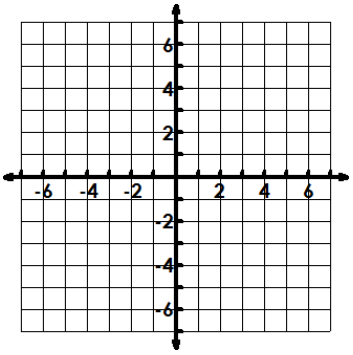
5.7 – Notes & Practice - Radical Characteristics **Name:** _____

Honors Algebra 2 **Date:** _____

Sketch the graph and fill in the chart for each. Make a chart of your points by each graph.

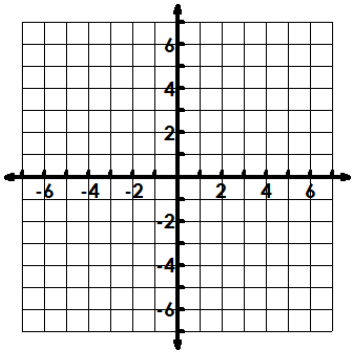
1. $f(x) = \sqrt{x}$

Starting Pt:	Inc or Dec:
Domain:	Range:
Abs. Max or Abs Min:	x-int:
End Behavior: $x \to$ ____, $f(x) \to$ _____ $x \to$ ____, $f(x) \to$ _____	



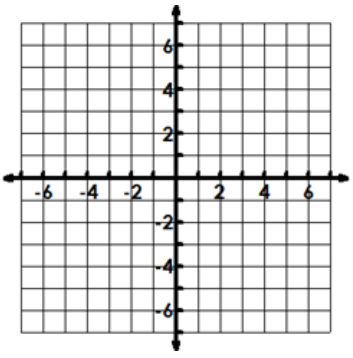
2. $f(x) = \sqrt{-x}$

Starting Pt:	Inc or Dec:
Domain:	Range:
Abs. Max or Abs Min:	y-int:
End Behavior: $x \to$ ____, $f(x) \to$ _____ $x \to$ ____, $f(x) \to$ _____	



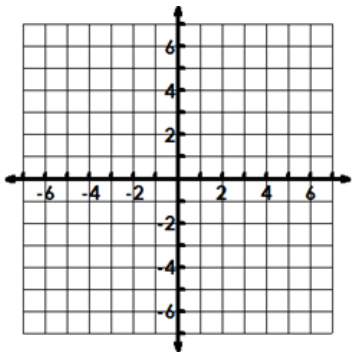
3. $f(x) = \sqrt[3]{x}$

Starting Pt:	Inc or Dec:
Domain:	Range:
Abs. Max or Abs Min:	y-int:
End Behavior: $x \to$ ____, $f(x) \to$ _____ $x \to$ ____, $f(x) \to$ _____	



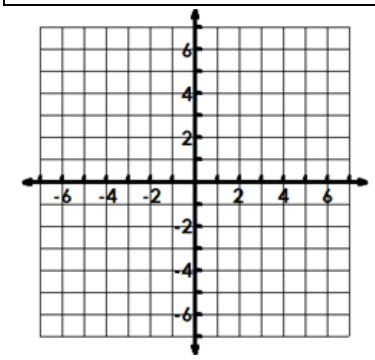
4. $f(x) = -\sqrt[3]{x}$

Starting Pt:	Inc or Dec:
Domain:	Range:
Abs. Max or Abs Min:	x-int:
End Behavior: $x \to$ ____, $f(x) \to$ _____ $x \to$ ____, $f(x) \to$ _____	



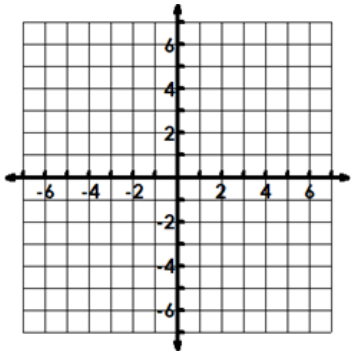
5. $f(x) = -4\sqrt{x+2} - 3$

Starting Pt:	Inc or Dec:
Domain:	Range:
Abs. Max or Abs Min:	y-int:
End Behavior: $x \to$ ____, $f(x) \to$ _____ $x \to$ ____, $f(x) \to$ _____	



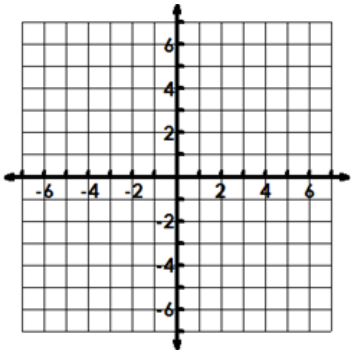
6. $f(x) = \sqrt{-2(x+1)} + 2$

Starting Pt:	Inc or Dec:
Domain:	Range:
Abs. Max or Abs Min:	x-int:
End Behavior: $x \to$ ____, $f(x) \to$ _____ $x \to$ ____, $f(x) \to$ _____	



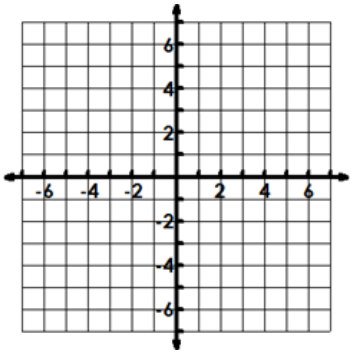
7. $f(x) = -2\sqrt[3]{x-1} + 3$

Starting Pt:	Inc or Dec:
Domain:	Range:
Abs. Max or Abs Min:	x-int:
End Behavior: $x \to$ ____, $f(x) \to$ _____ $x \to$ ____, $f(x) \to$ _____	



8. $f(x) = \sqrt[3]{-3(x+2)} - 4$

Starting Pt:	Inc or Dec:
Domain:	Range:
Abs. Max or Abs Min:	y-int:
End Behavior: $x \to$ ____, $f(x) \to$ _____ $x \to$ ____, $f(x) \to$ _____	



Write the equation of the radical with the given transformations.

9. Compressed vertically by ¼ , reflected over the y-axis, left 4, and down 72.

10. Stretched horizontally by 7, reflected over the x-axis, right 13, and up 42.