**Chapter 1 – Graphing Assignment**

Find a partner and complete the following. **You will hand it in on Monday. I suggest you graph each with an online graphing program like fooplot.com or desmos.com to check your work!**

For the following 4 functions,

* List all of the transformations.
* Create a parent table and transformed table.
* Make a graph.
* State the Domain and Range.
* State the Intervals of Increase/Decrease.
* State the End Behaviours.
* State the equations of the asymptotes if applicable.

|  |  |
| --- | --- |
| a) | b) |
| c) | d) |

vertically stretched by factor 3

reflected in the y-axis

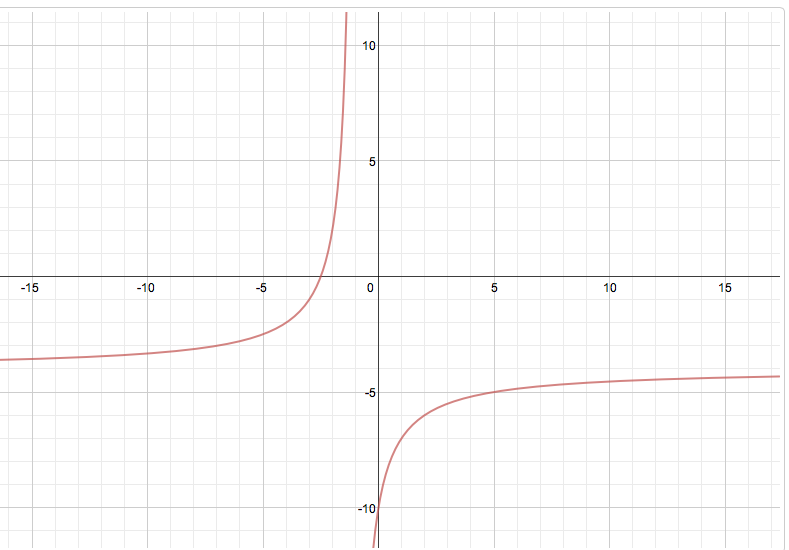
translated left 1 unit

translated down 4 units

Interval of Increase

End Behaviours

Asymptotes x=-1, y = -4



horizontally stretched by factor 2

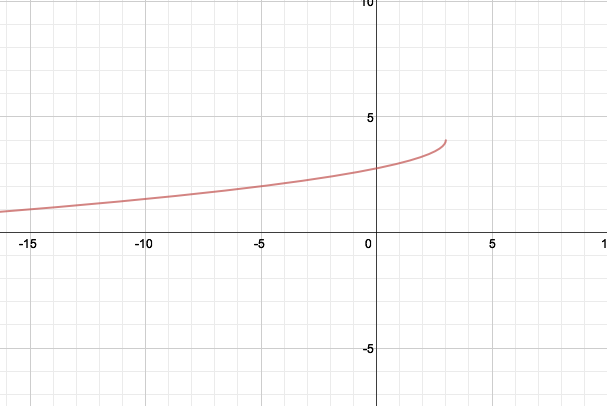
reflected in the x and the y-axis

translated right 3 units

translated up 4 units

Interval of Increase

End Behaviours



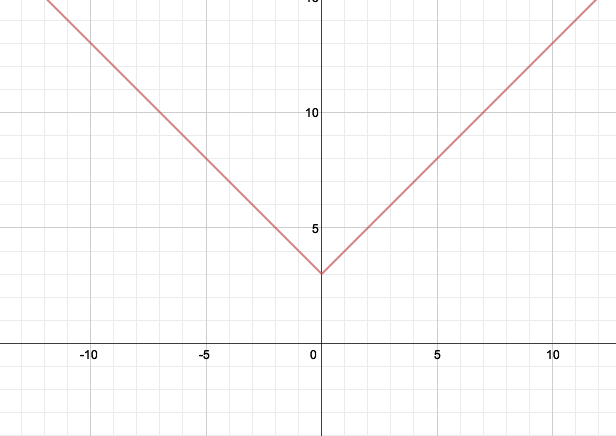
vertically compressed by factor 0.5

horizontally compressed by factor 0.5

translated up 3 units

Interval of Increase ; Intervals of Decrease

End Behaviours



d)

vertically stretched by factor 6

reflected in the y-axis

horizontally compressed by factor 1/45

translated left 2 unit

translated down 3 units

Interval of Increase …(-8,-4) , (0,4) , (8,12)… (0+4n, 4+4n), where

Intervals of Decrease …(-4,0), (4,8), (12,16) … (4 + 4n, 8+ 4n), where

End Behaviours

