

Logarithmic Functions Menu Task:

Build as *few* logarithmic functions as possible to satisfy each constraint at least once.

The grids below are to help make your thinking visual.

A.	Is always increasing	B.	Has an x-intercept at -1
C.	Never enters quadrant II	D.	Only in quadrants II and III
E.	Vertical asymptote at $x = 0$	F.	Always decreasing
G.	Vertical asymptote at $x = -3$	H.	Has a negative y-intercept

Which constraints pair nicely?

Which constraints cannot be paired?

Is it possible to solve in 2, 3, or 4 logarithmic functions?

Describe how and why you built each logarithmic function.

Be sure to identify which logarithmic functions satisfy which constraints.



