Objective 2 - Graph

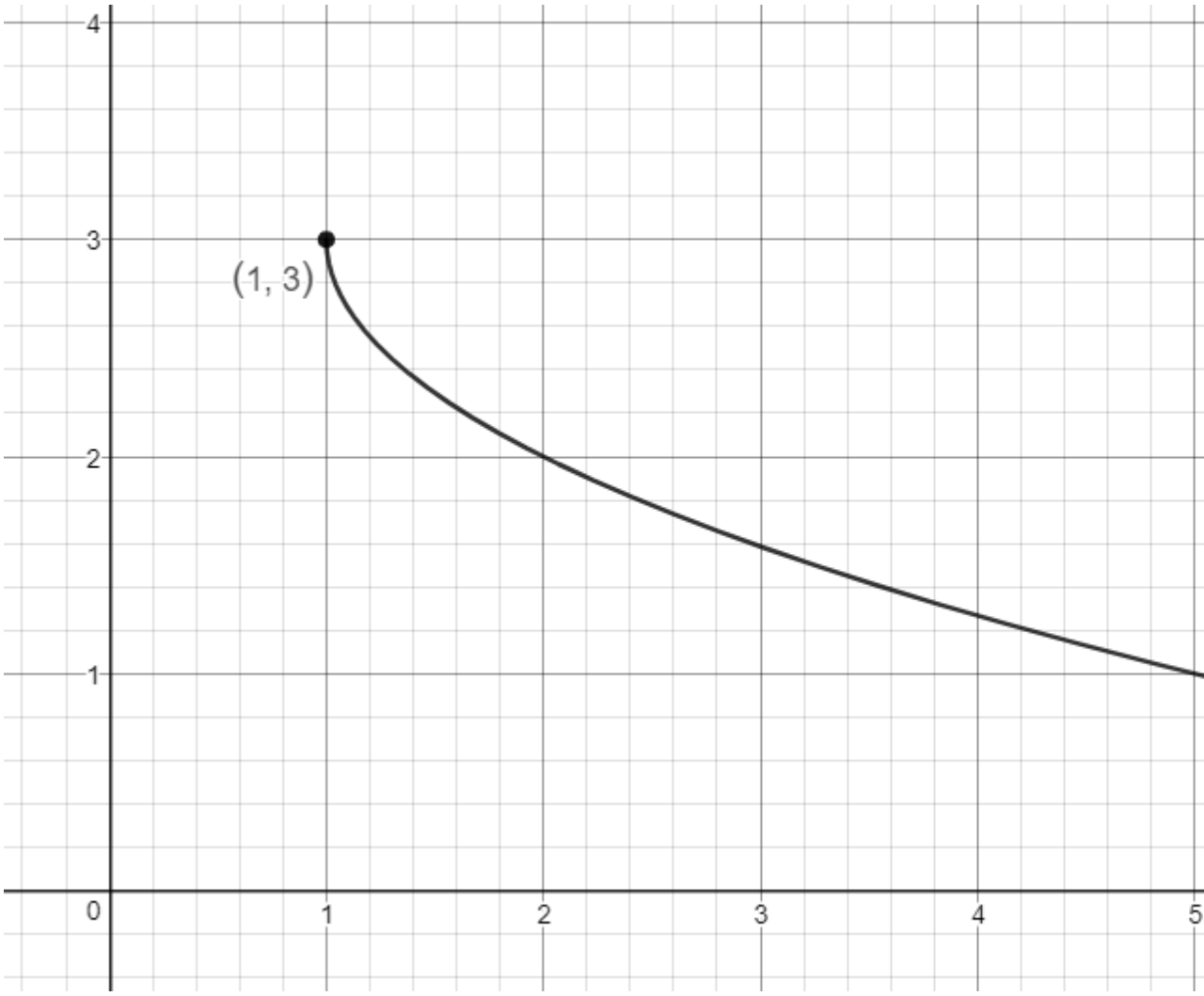
Identify the graph of a radical function.

Note: No section in the textbook directly talks about how to graph radical functions.

First, watch this video to learn how to convert between a radical function and its graph. I also suggest visiting this Desmos page to see how various numbers affect radical functions. Focus on what changing h and k does to each type of radical function.

Question 1 *Write the equation of the function graphed below. Assume* $a = 1$ *or* $a = -1$.

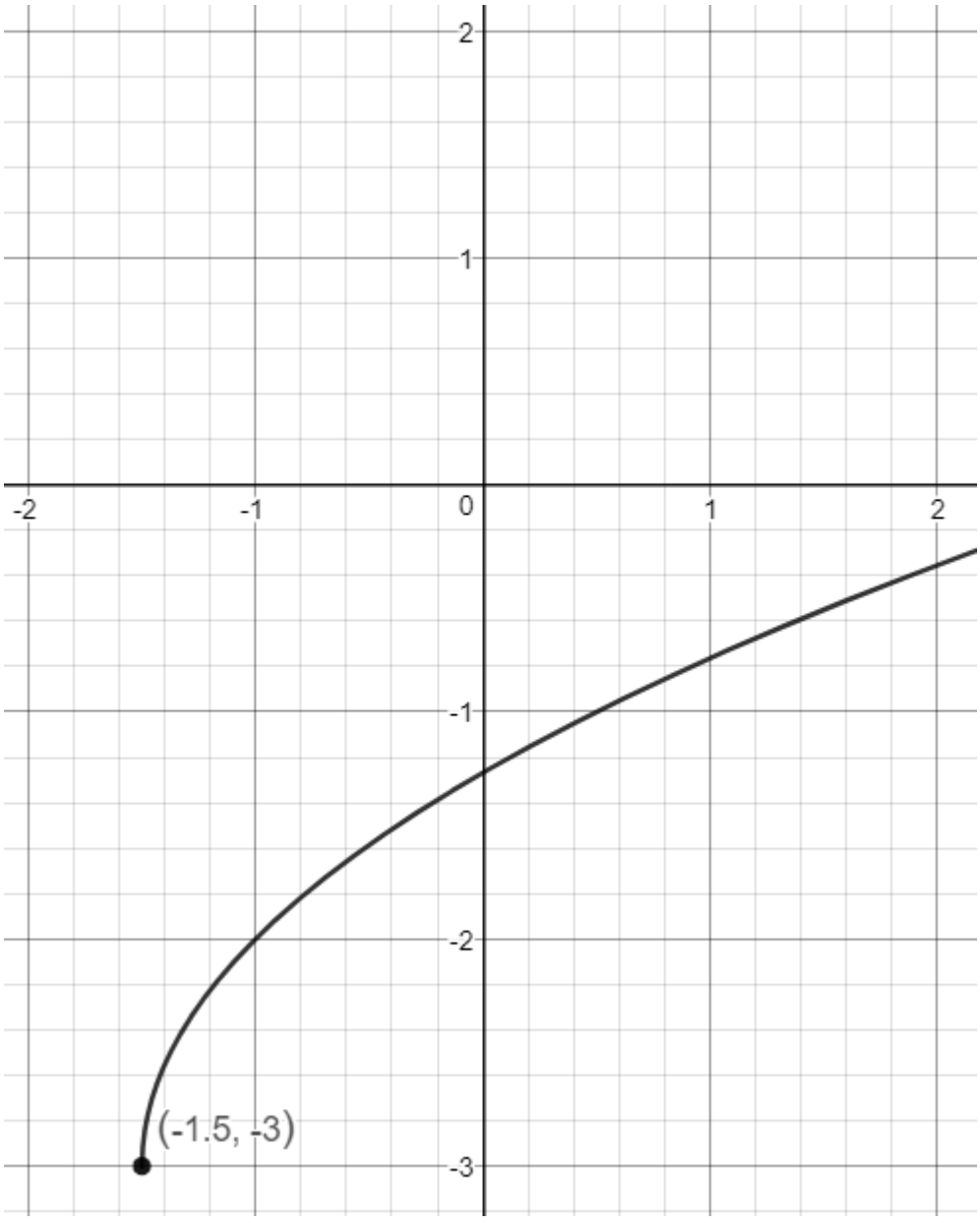
Learning outcomes:
Author(s): Darryl Chamberlain Jr.



$f(x) = \boxed{-1}\sqrt{\boxed{x-1}} + \boxed{3}$

Question 2 *Write the equation of the function graphed below. Assume* $a = 1$ *or* $a = -1$.

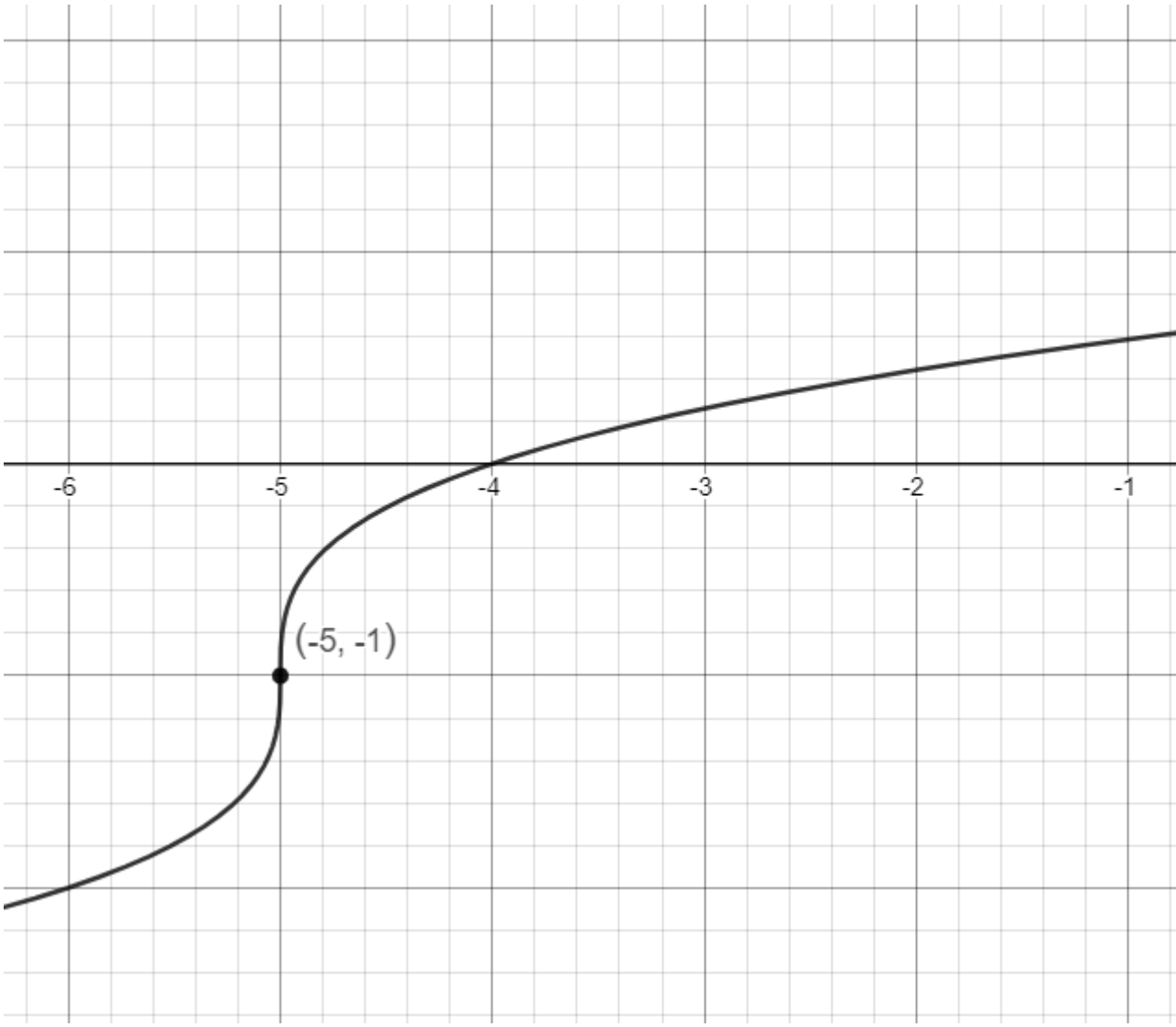
Hint: Be sure to remove the decimal. For example, if x *is shifting by* 0.75 *to the right, then standard form would be* $4x - 3$ *rather than* $x - 0.75$.



$f(x) = \boxed{1}\sqrt{\boxed{2x+3}} + \boxed{-3}$

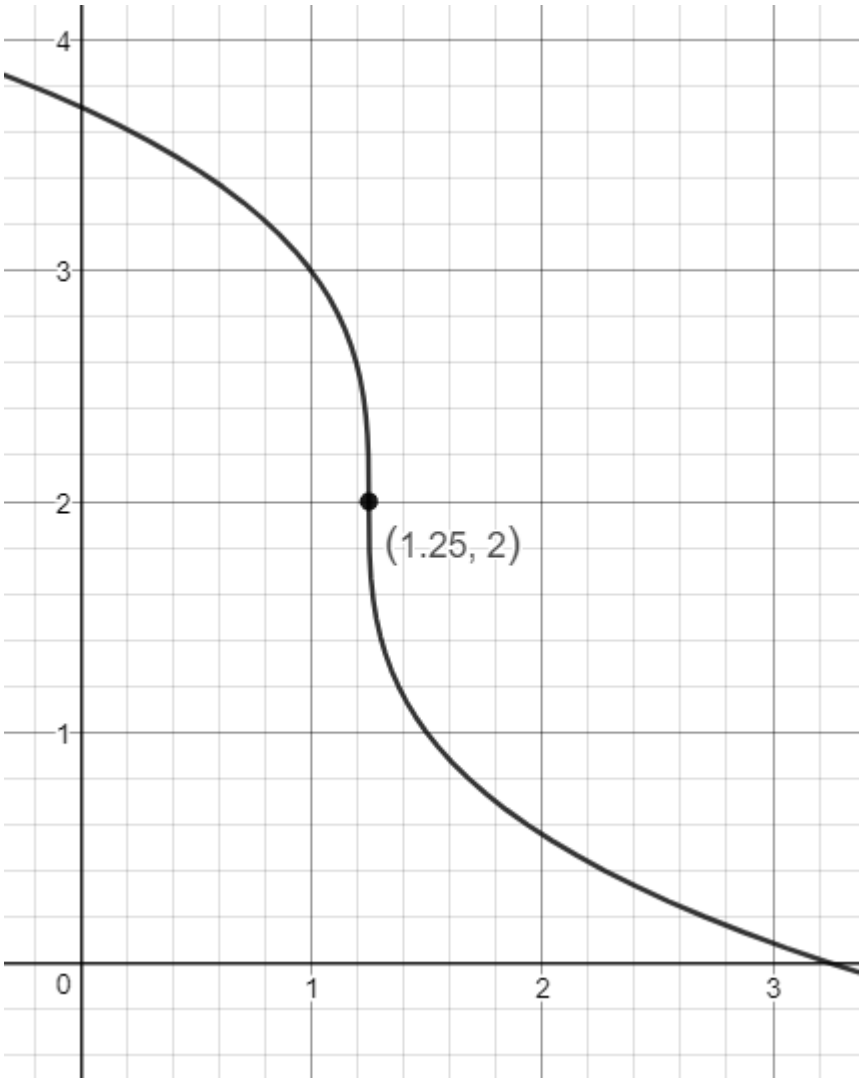
Question 3 *Write the equation of the function graphed below.*

Objective 2 - Graph



$f(x) = \boxed{1}\ \sqrt[3]{\boxed{x+5}} + \boxed{-1}$

Question 4 *Write the equation of the function graphed below. Hint: Be sure to remove the decimal. For example, if x is shifting by 0.75 to the right, then standard form would be $4x - 3$ rather than $x - 0.75$.*



$f(x) = \boxed{-1}\sqrt[\boxed{3}]{\boxed{4x-5}} + \boxed{2}$