

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 $a = -1$.



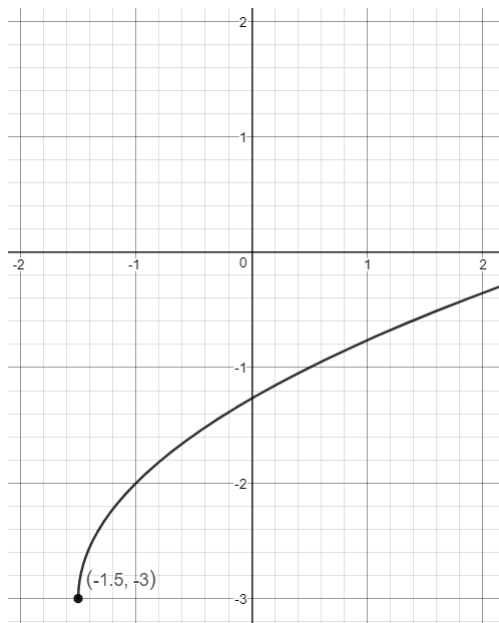
$$f(x) = \boxed{-1}\sqrt{\boxed{x-1}} + \boxed{3}$$

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 $x - 0.75$.

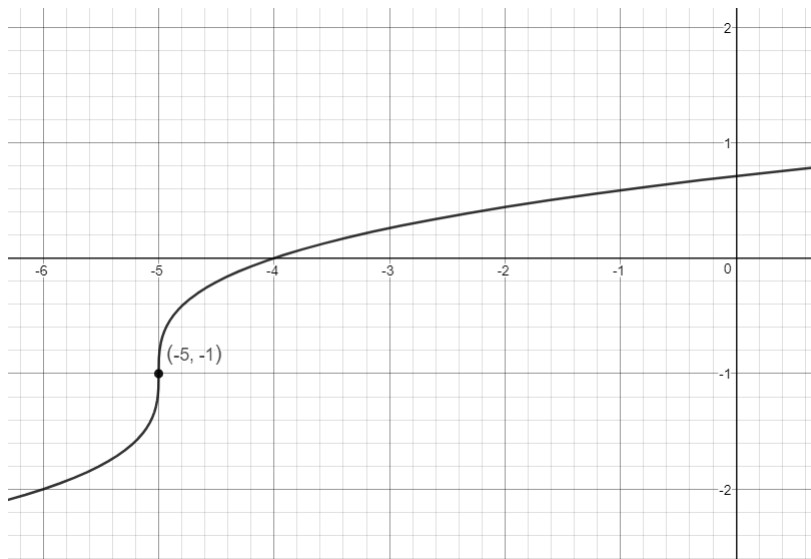
Learning outcomes:
Author(s): Darryl Chamberlain Jr.

Objective 2 - Graph



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

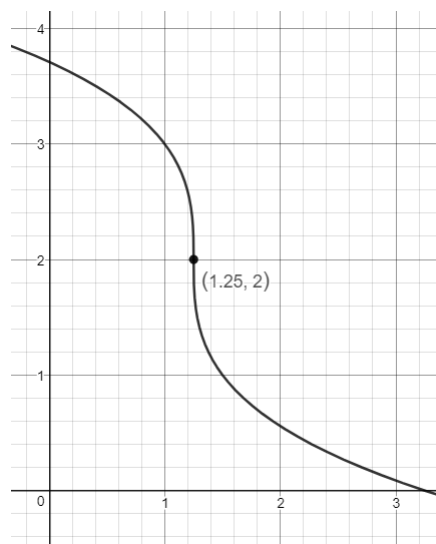
Question 3 Write the equation of the function graphed below.



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

Objective 2 - Graph

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 $x - 0.75$.*



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