



## Practice – 1

Once you feel confident with curve sketching, complete problems 1 and 2. Check your answers by going to the Solutions tab in Moodle.

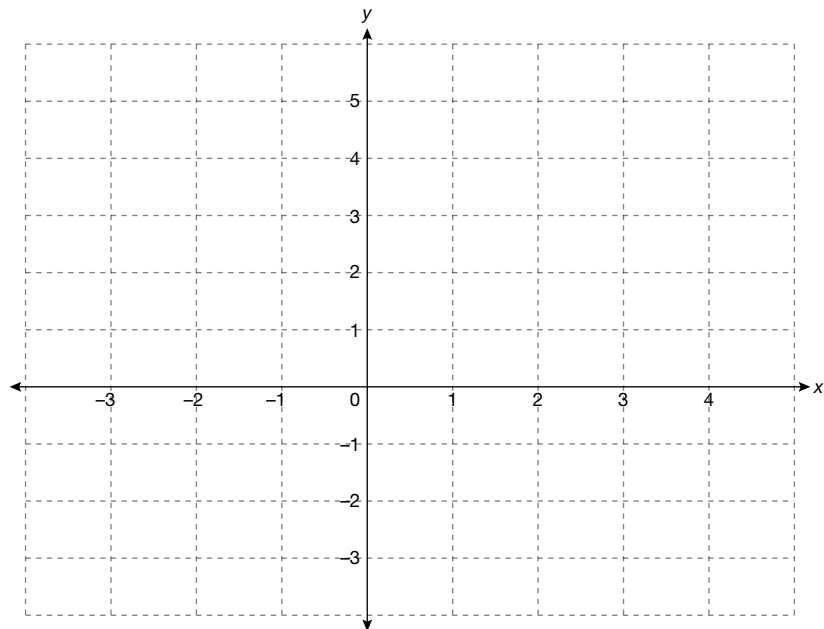
**Instructions:** Answer each of the following practice questions on a separate piece of paper. Step by step solutions are provided under the Solutions tab. You will learn the material more thoroughly if you complete the questions before checking the answers.

- Follow the Steps to Successful Curve Sketching to sketch the graph of the function  $f(x) = x^{\frac{1}{2}}(1 - x)$ .



domain	
intercepts	
asymptotes	
symmetry	
intervals of increase and decrease and critical points	increasing: decreasing: CP:
local extrema	max: min:
concavity and inflection points	down: up: IP:

2. Follow the Steps to Successful Curve Sketching to sketch the graph of the function  $f(x) = \frac{x^2 + 1}{x^2 - 1}$ .



domain	
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asymptotes	
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