

Curve Sketching

Things you should already know

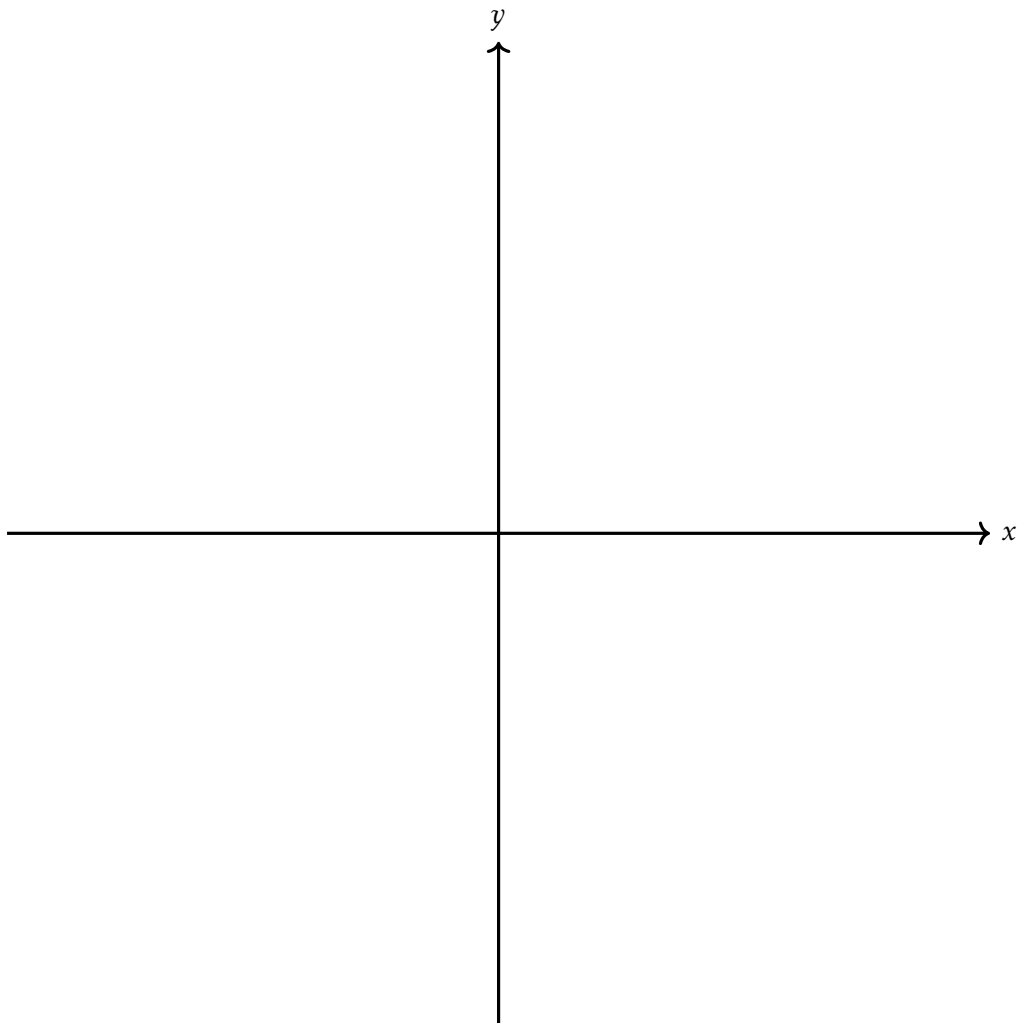
You should already be able to sketch:

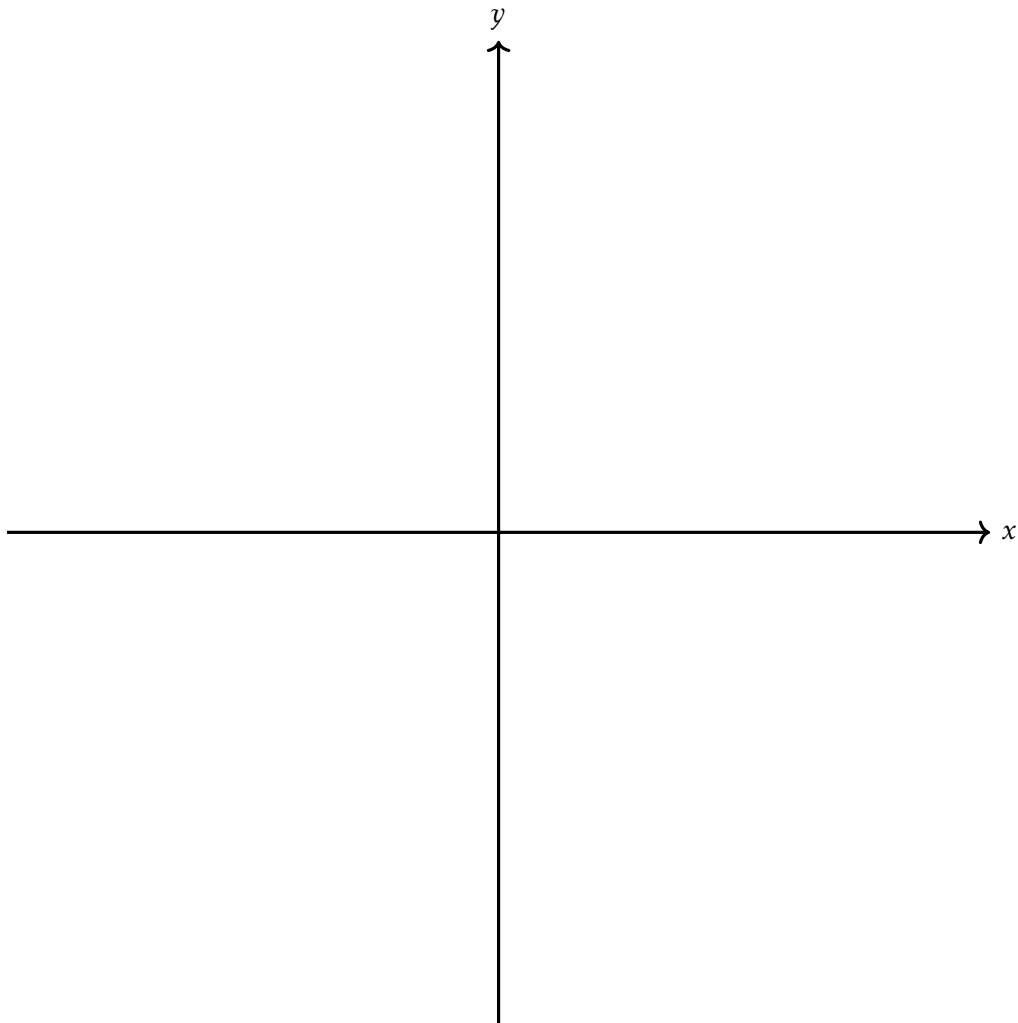
1. $y = mx + c$
2. $y = ax^2 + bx + c$
3. $y = x^m$
4. $y = \sqrt{x}$
5. $y = \sin x, y = \cos x, y = \tan x$

Polynomial Functions

Example

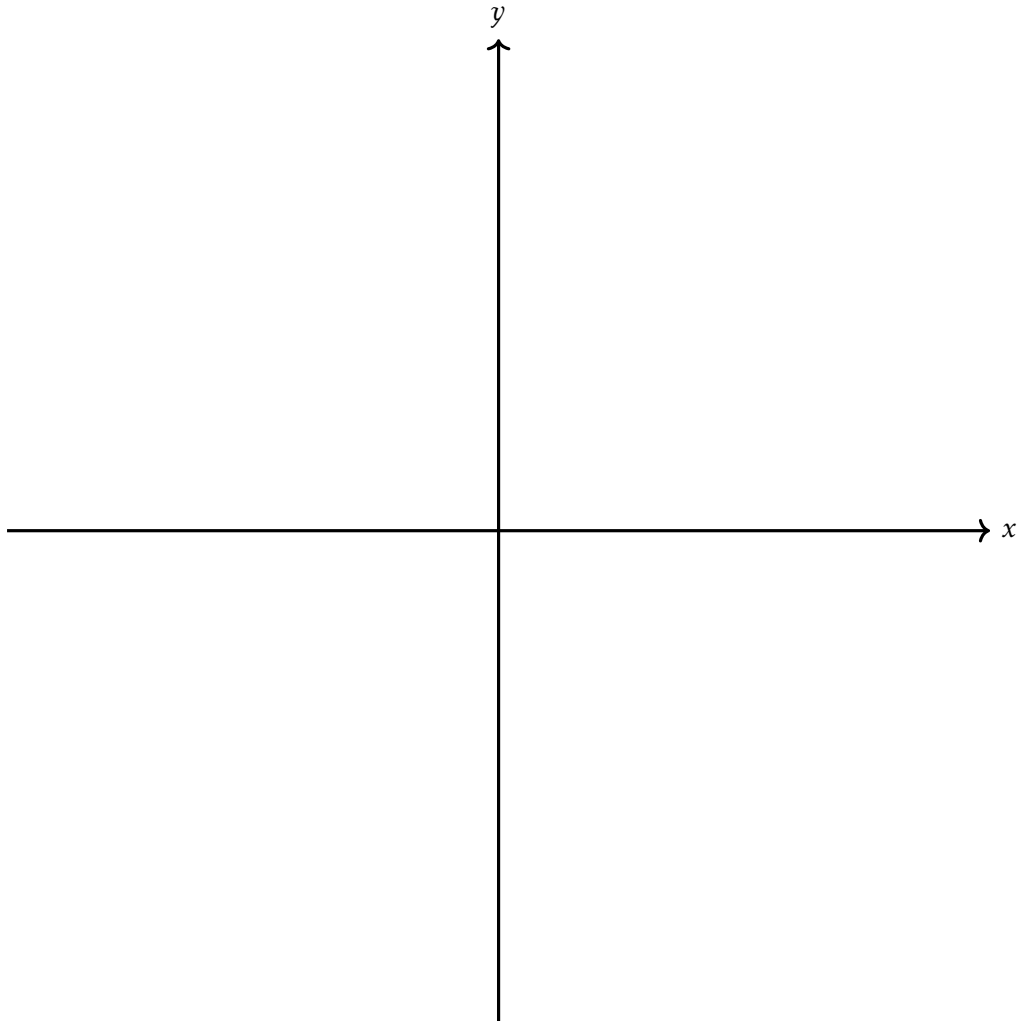
Sketch $y = x(x - 1)(x + 2)$



ExampleSketch $y = x(x - 1)^2(x + 2)^3$ 

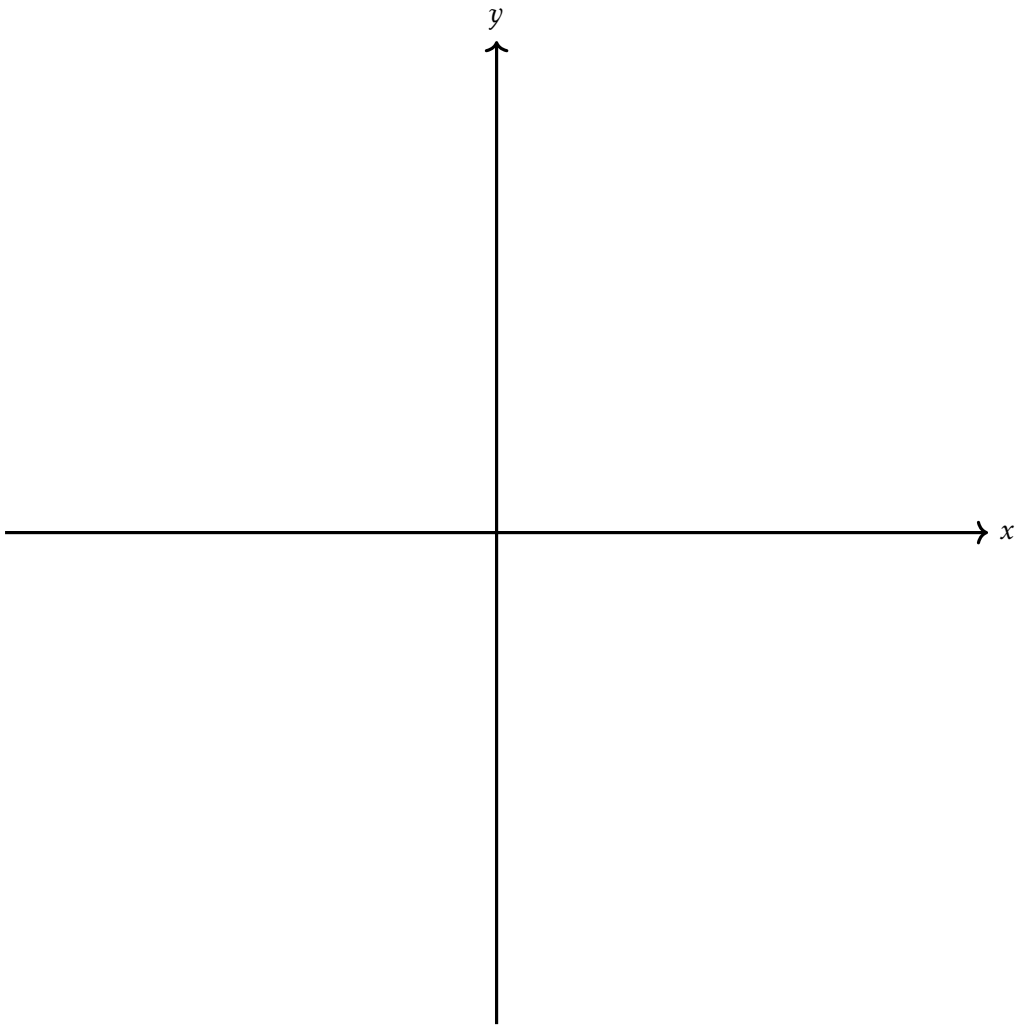
Rational Functions**Example**

Sketch $y = x + \frac{1}{x}$ and $y = x - \frac{1}{x}$



Example

Sketch $y = \frac{x^2 - 4x + 3}{x^2 - 6x + 10}$



Example

Sketch $y = \frac{1}{1+x^2}$

