

Closing *Tues*: 4.4-5 (graphing)

Closing *Thurs*: 4.7 (applied max)

Final: Sat, Dec. 9, 1:30-4:20pm, Kane 130

Assigned seats, for your seat go to:

catalyst.uw.edu/gradebook/aloveles/102715

Homework Problem 5 Note:

$y = \sqrt{|x|} + \frac{x}{10}$ is two function

a) If $x \geq 0$, then $y = \sqrt{x} + \frac{x}{10}$

b) If $x < 0$, then $y = \sqrt{(-x)} + \frac{x}{10}$

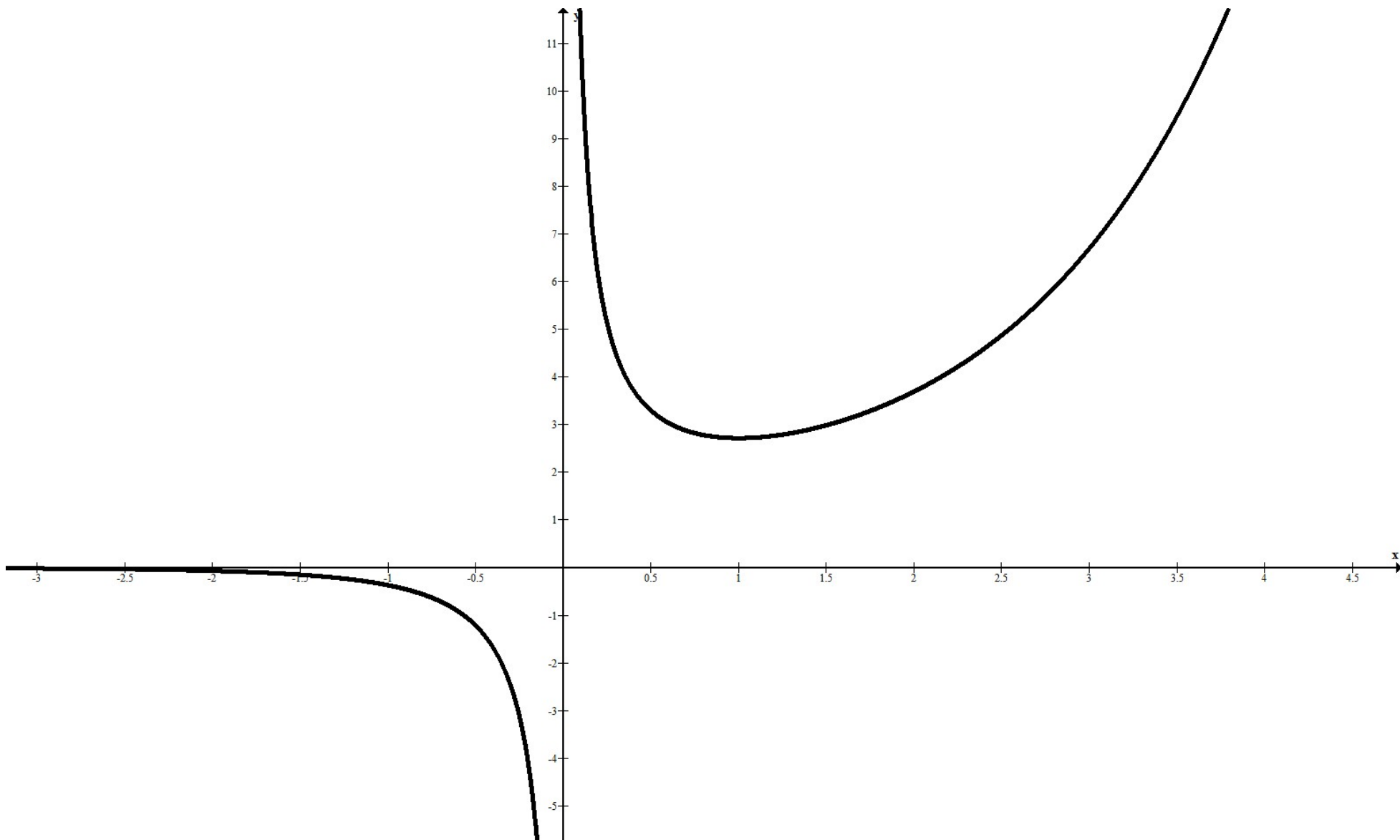
Example: Sketch the graph of

$$f(x) = \frac{e^x}{x}$$

4.5 Curve Sketching

1. Domain?
2. Asymptotes?
Vertical (limit - both sides)?
Horizontal (limit $x \rightarrow \pm\infty$)?
3. 1st deriv. info?
4. 2nd deriv. info?
5. Plot points

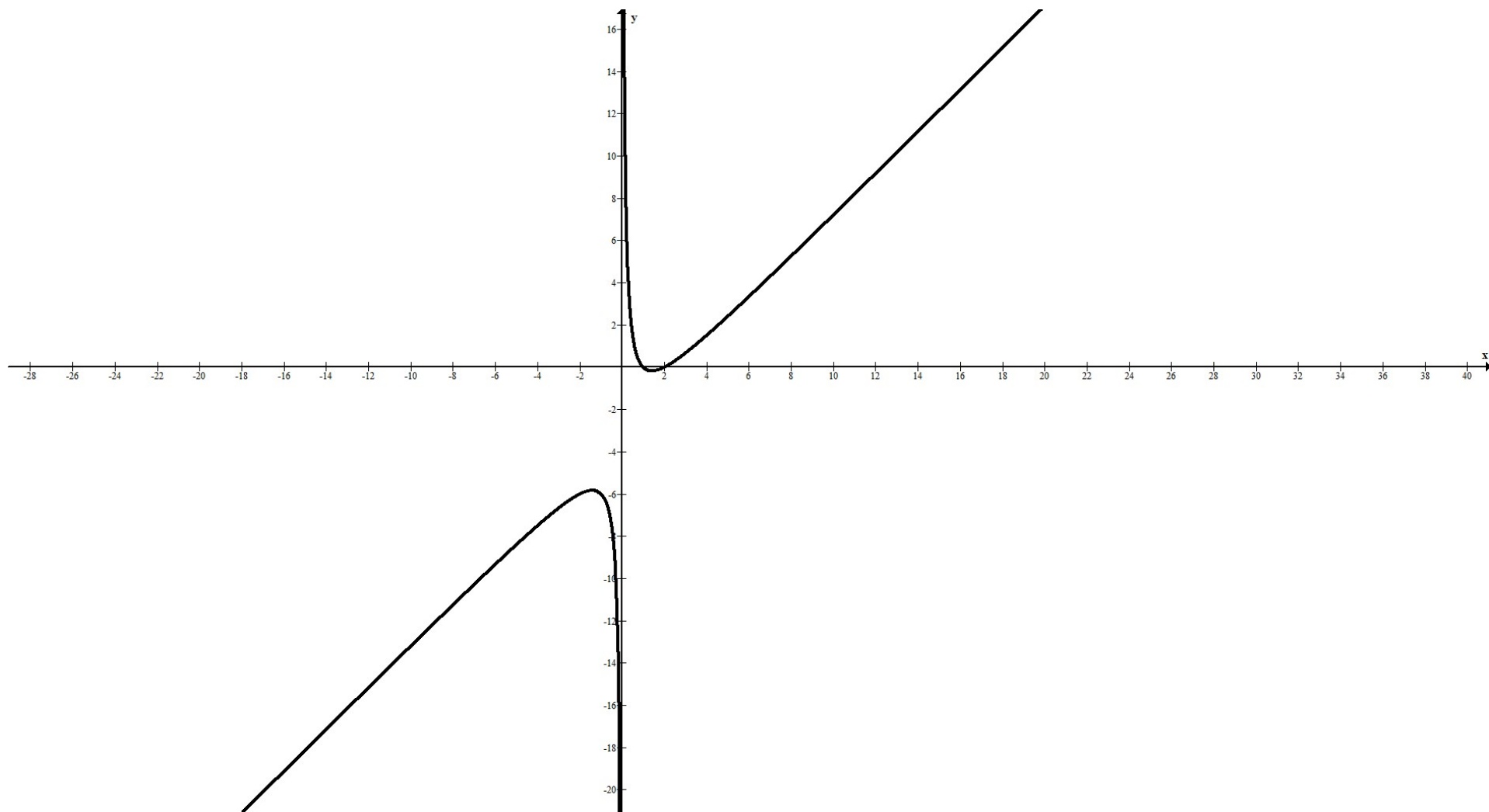
$$f(x) = \frac{e^x}{x}$$



Example: Sketch the graph of

$$f(x) = \frac{x^2 - 3x + 2}{x}$$

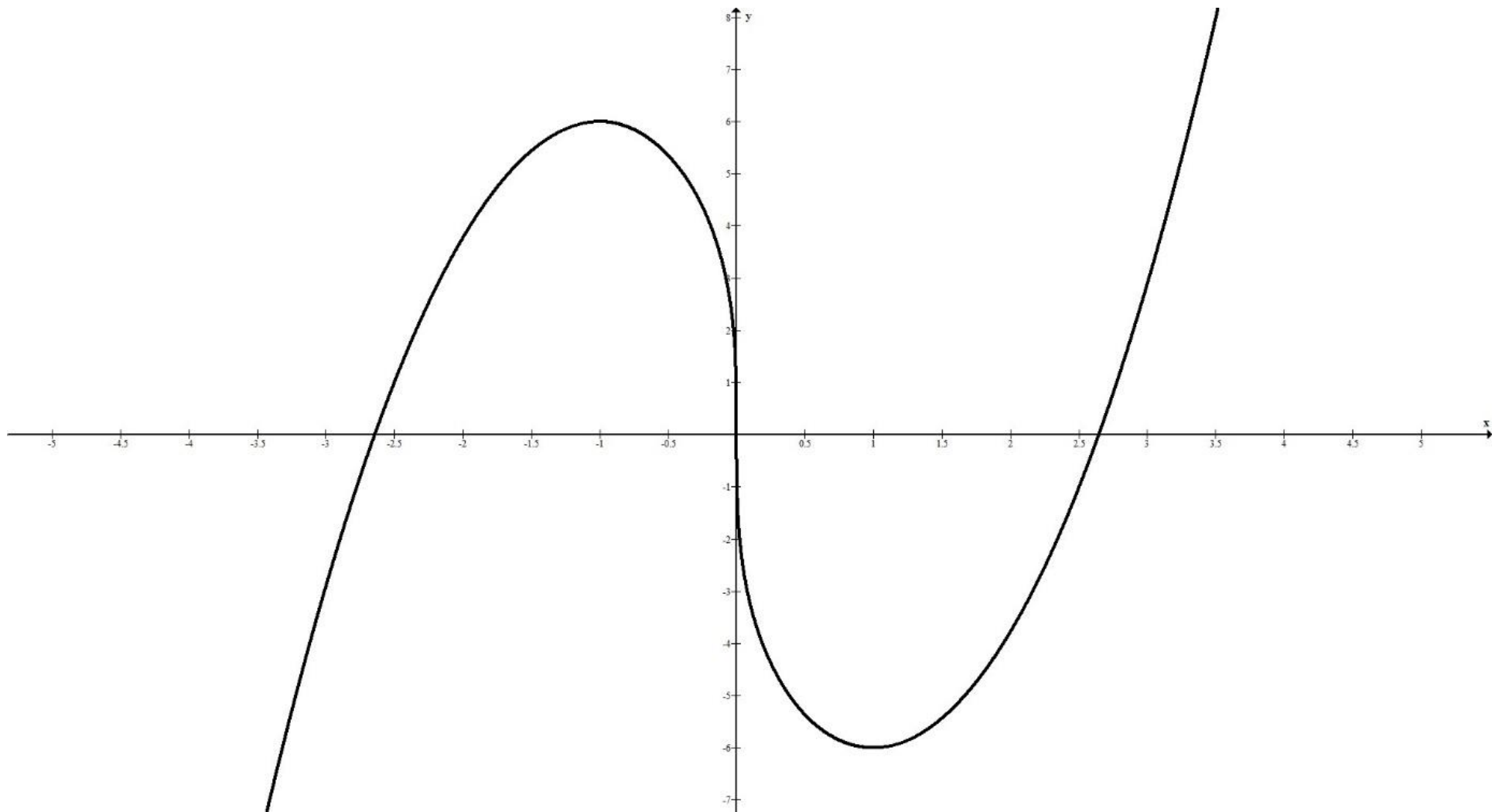
$$f(x) = \frac{x^2 - 3x + 2}{x}$$



Example: Sketch the graph of

$$f(x) = x^{\frac{1}{3}}(x^2 - 7)$$

$$f(x) = x^{\frac{1}{3}}(x^2 - 7)$$



Example: Sketch the graph of

$$f(x) = x^4 - 2x^2$$

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