

HAT
Chapter 8 REVIEW

1/25/18

1) Simplify

a)
$$\frac{4x-2}{x^2+2x-8} - \frac{3}{x+4}$$

b)
$$\frac{2x^2+5x-3}{x^2+7x+12} \div \frac{2x^2+9x-5}{x^2-2x-24}$$

✓

$$\frac{9}{x^2 - 2x - 15} - \frac{2}{x + 3}$$

$$\frac{\left(x + \frac{2}{x-3}\right)}{\left(x + \frac{6}{x-3}\right)}$$

$$\frac{\frac{x-2}{x^2-3x}}{\frac{x^2+4x-12}{x^2-9}}$$

$$\frac{2x+10}{32-8x} \cdot \frac{x^2-10x+24}{x^2-x-30}$$

2) Solve $\frac{x}{x-3} + \frac{7x-6}{x^2-x-6} = \frac{2}{x+2}$

$$\frac{x}{x^2 - 2x + 1} = \frac{2}{x + 1} + \frac{4}{x^2 - 1}$$

3) Graph.

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

Graph.

$$f(x) = \frac{-4}{x+1} + 3$$

- 4) A camper can paddle a canoe at a speed of 5 mph in still water. She travels 20 miles downstream in the same amount of time that it takes her to go 5 miles upstream. How fast is the current?

- 5) We know that y varies jointly with x and z .
If $y=4$, when $x=3$, and $z=8$, find x when $y=-2$ and $z=3$.

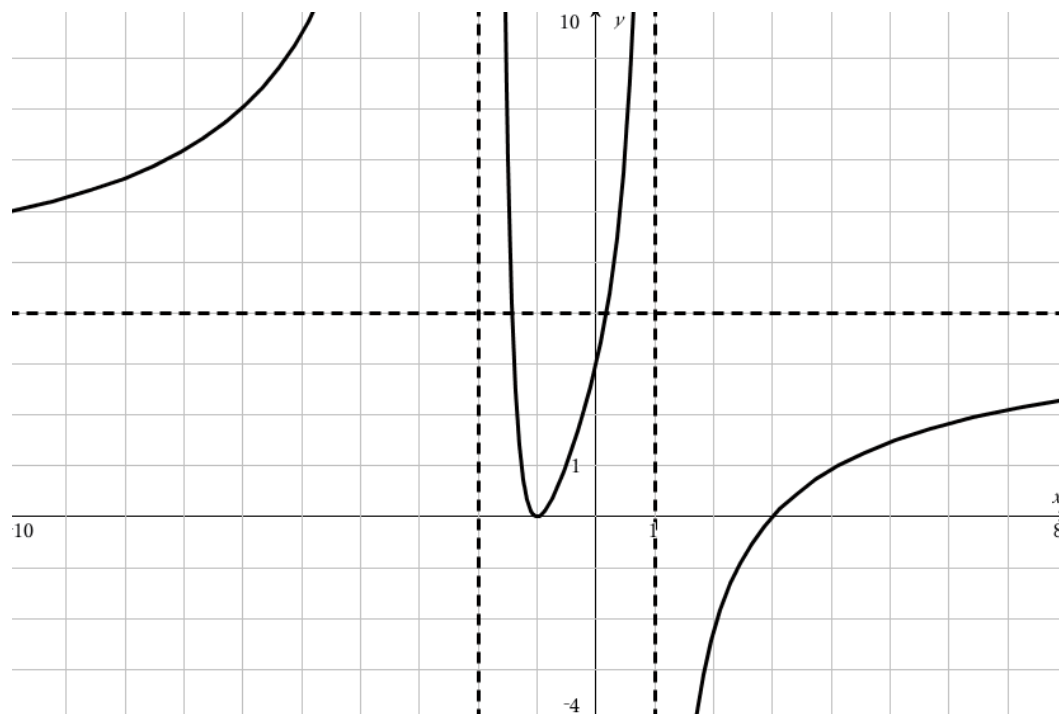
6) Graphing...

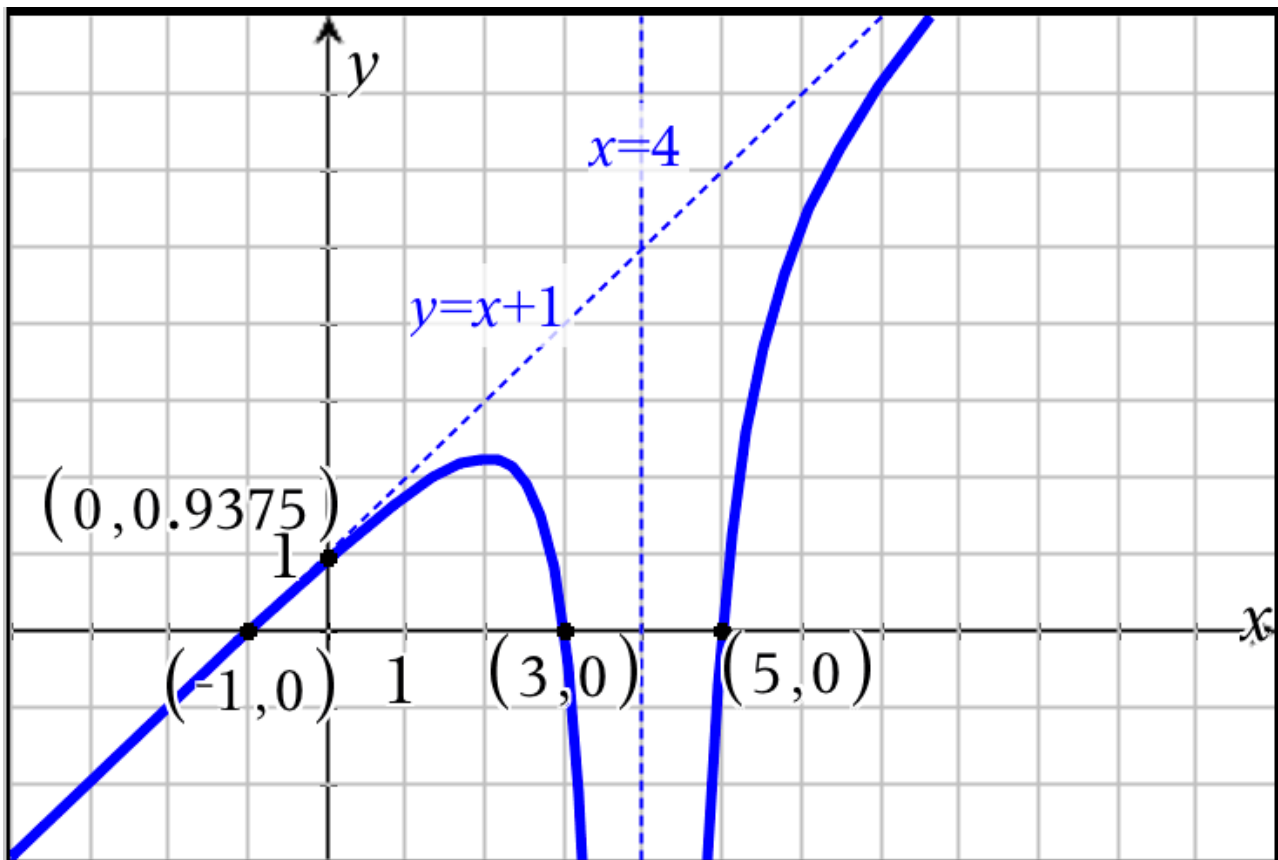
a) Given an equation, make the graph. (see worksheet)

$$y = \frac{2x^3 + 16}{2x^2 + 5x - 3}$$

$$f(x) = \frac{3(x+1)^2(x-2)(x-1)}{x(x+4)^2(x-5)(x-1)}$$

6b) Graphing... given a graph, write the equation.





January 25, 2018

