

Calculus DS

Have your practice assessment out, we'll go over it in small groups

If you haven't done it yet, use this time for that

Remember:

Weds is a mini lesson usually

Thurs is hw/retake time (okay to go senior lunch if passing)

F-BI Find. all vert. asympt. Justify.

$$g(x) = \frac{2x-8}{x^2-3x-4}$$

$$\frac{2(x-4)}{(x-4)(x+1)}$$

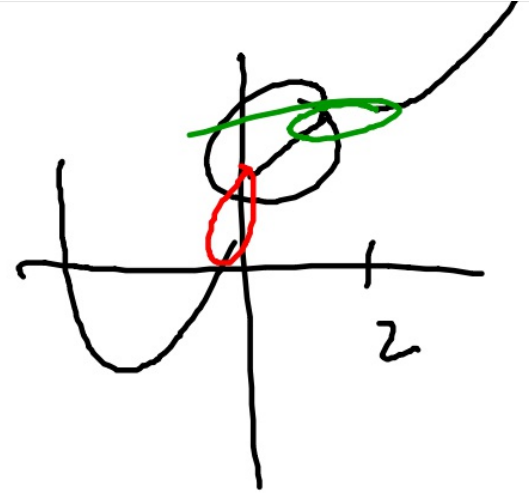
$$g(x) = \frac{2}{x+1} \rightarrow \frac{x=-1 \text{ v.a.}}{\underline{\hspace{2cm}}}$$

$$\lim_{x \rightarrow -1^-} \frac{2}{x+1} = \frac{2}{-1+1} = \frac{2}{0^-} = -\infty$$

$$\boxed{\lim_{x \rightarrow \infty} g(x) = \frac{2\infty}{\infty^2} = 0}$$

$y=0$

$$g(x) = \begin{cases} x^2 - 5 & x < 0 \\ ax + b & 0 < x < 2 \\ 2x^2 - 6 & x \geq 2 \end{cases}$$



x=0

$$-5 = a(0) + b$$

$$-5 = b$$

x=2

$$a(2) + b = 2$$

$$2a + b = 2$$

