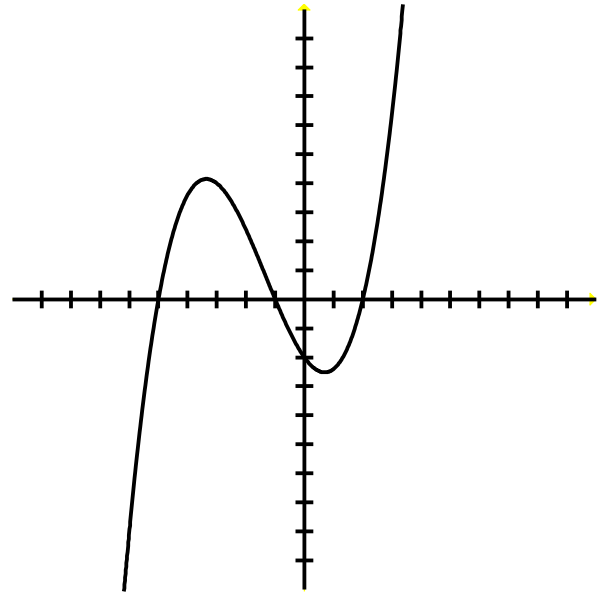1) Given the graph to the right, determine the intervals on which the derivative is positive.

$(-\infty, -3.4), (0.8, \infty)$

...or something close to that, I guesstimated those values.

2) Given the graph to the right, determine the intervals on which the derivative is negative.

$(-3.4, 0.8)$

...or something close to that, I guesstimated those values.

2) Find the limit below.

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

2) Find the limit below.

$$\lim_{x \to -4^+} \frac{1}{x+4} = \infty$$