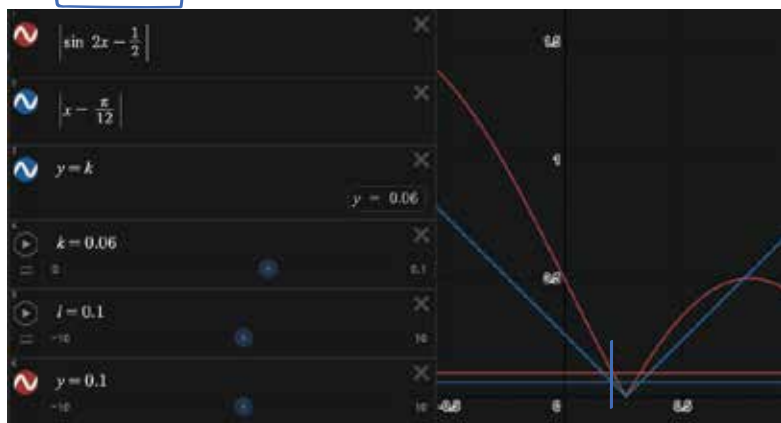


$$\delta = 0.06$$

<https://www.desmos.com/calculator/spir2xirzk>
<https://www.ocf.berkeley.edu/~yoseni/math/epsilon-delta.pdf>

↑ Zach and abi recommended this..?



Albert Huang

4 Sep 2020. 1 hour

190:

$$\lim_{x \rightarrow 2} \frac{2x^2 - 3x - 2}{x - 2} = 5$$

$$\frac{(2x-2)(x-2)}{x-2} = 5$$

$$(2(x+\delta)-2) = 5+\epsilon$$

$$2(2)+2\delta-2=5+\epsilon$$

$$2+2\delta=5+\epsilon$$

$$2\delta=\epsilon+3$$

$$\delta = \frac{\epsilon+3}{2}$$

192:

$$\lim_{x \rightarrow 2} x^2 + 2x = 8$$

$$(x \pm \delta)^2 + 2(x \pm \delta) = 8 \pm \epsilon$$

$$x^2 + \delta^2 + 2x\delta + 2x \pm 2\delta = 8 \pm \epsilon$$

$$4 + \delta^2 + 4\delta + 4 \pm 2\delta = 8 \pm \epsilon$$

I think I'm confused... how were we supposed to do this? I felt like each step in class made sense, but I'm not confident in the big picture of the proof.