Response to homework: 20math401retHW1<sub>2.pdf</sub>

KBe20math401srcDeltaEpsilonReview1.png  $|x-2||x+4|<\epsilon$  so near x=2, |x-2| is smol, so the primary term contributing to the value of the total function is |x+4|. Using the above condition,  $|x-2|<1\Rightarrow 1< x<3\Rightarrow 5< x+4<7$ 

So, |x+4| is at most 7, we could try substituting it in and getting  $7|x-2|<\epsilon$ . Also do the other side:  $5|x-2|<\epsilon$ 

You also need to do this: KBe20math401srcDeltaEpsilonProof2.png for the actual proof.

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