

Winter Break Assignment-Calculus

Below is a list of the work that should be completed over your break.

For the HW, all of the assignments and HW pages are on the portal.

As you complete the HW assignments, please email them to me so I can correct them and enter your grade into the gradebook. Soon upon returning to classes in January, you will have an assessment on these topics. Feel free to email me with any questions. We can even set up a Zoom session if you'd like. Do not wait until the last week of break to start the assignments. I cannot guarantee I will be able to answer any questions within that time or grade all of the HW assignments before you are tested on the material. All assignments are due by Jan. 11th. No exceptions.

Topic 1: Power Rule for Derivatives and Derivative of Sine, Cosine, and e^x

Watch Video - [Derivatives-Power Rule, Sine, Cosine, \$e^x\$](#)

HW: p.135: #13,14,16,17,19,20,25,27,32,33,37-59 odd

Topic 2: Product Rule and Quotient Rule

Watch Video - [Product and Quotient Rules](#)

HW: p.146: #1,2,8,12,15,17,19,39,42,43,52,57

Topic 3: The Chain Rule

Watch Video - [the chain rule](#) The guy in the video goes over the derivative of $\ln(x)$.

Please write it down. He goes kind of fast through some of the examples, so get ready to pause the video as you write down his examples.

Optional second video on the chain rule (if you need more explanation): [a longer chain rule video](#)

HW: p.160: #7,9-12,21,48-50,60,67,93