The goal of this activity is to show you some motivations of why calculus is interesting. Go to the website https://brilliant.org/practice/indeterminate-forms. Read all the subpages on indeterminate Forms (using the right-hand side "navigation bar") and try to answer the questions. Then, do the same for the Motivating Examples page (https://brilliant.org/practice/motivating-example-for-limits).

Note about brillant.org.
The website requires a free sign up if you want to see the answers to the questions and some additional explanations. Whether you decide to sign up or not is up to you. (In case you want some extra explanations on the questions asked, then I would recommend it, and otherwise not).
In all cases, note that we will only use the free part of the website.

Here are some questions to think about when reading these pages:

1. How does the speedometer of a car work?
2. What is the purpose of computing the speed of a car using ever smaller time intervals?
3. What do we need to do to determine the actual *instantaneous* speed of a car (or of another object)?
4. What are the three functions studied in the Motivating Examples page?

We will talk about these questions in class.