This tutorial will be focused on midterm review:

- Solving select questions (1, 2a, 2c, 2d, and 4) from Midterm #2, 2018.
- Answering student questions about course concepts.

The sample midterm is available from
https://services.mathsoc.uwaterloo.ca/university/exambank.
A reminder of some important substitution rules:

1. Functions must be applied on values (i.e., all arguments must be values, not expressions)
2. Given a choice, evaluate expressions from left-to-right (or top-to-bottom)
3. When applying a user-defined function, all substitutions of argument values happen in one step.
4. When tracing a conditional expression,
   a. \((\text{cond [false exp]} \ldots) \Rightarrow (\text{cond} \ldots)\)
   b. \((\text{cond [true exp]} \ldots) \Rightarrow \text{exp}\)
   c. \((\text{cond [else exp]}) \Rightarrow \text{exp}\)
5. \((\text{first (list a b)}) \Rightarrow a\), where a and b are values.
6. \((\text{rest (list a b)}) \Rightarrow (\text{list b})\), where a and b are values.
Finally, here’s an exercise for you to think about on your own:

The implementation of `debounce` in Q4 keeps the “last” copy of each element. Using accumulative recursion, write a version of `debounce` that keeps the “first” copy instead.