## Math 242 Reading Guide

Read "Why prime numbers still fascinate mathematicians, 2,3000 years later" by Martin H. Weissman, at https://theconversation.com/why-prime-numbers-still-fascinate-mathematicians-2-300-years-later-92484. Then read "The Sequence of Prime Numbers" by Hans Rademacher and Otto Toeplitz, at https://www.jstor.org/stable/j.ctt183pvvh.5.

Then answer the following questions. Bring your answers to class on Monday.

1. Except for 2 and 5 , all primes end in one of the digits $1,3,7$, or 9 . What are the relative frequencies of each of these final digits?
2. What did Robert Lemke Oliver and Kannan Soundararajan discover about the final digits of primes?
3. Describe a method of finding 10,000 consecutive integers, none of which are prime.
