- 1. A position function given by  $x(t) = 3t 7t^4$ , where x is in meters and time is in seconds.
  - (a) What is the acceleration at t = 2?
  - (b) What is the average acceleration between t = 1 and t = 2?
- 2. A position function is given by  $x(t) = 4t t^2$ , where x is in meters and time is in seconds. Find the velocity and acceleration functions. Sketch all three graphs, one on top of each other as in the video, with the same time axis for t = 0 through t = 4.