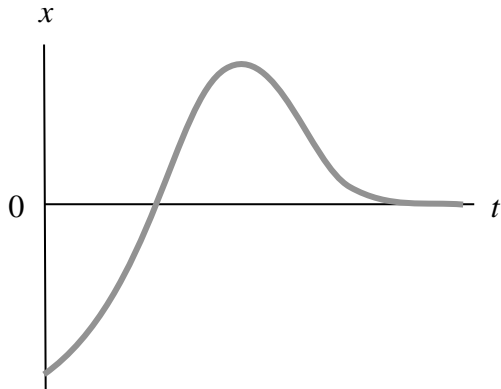
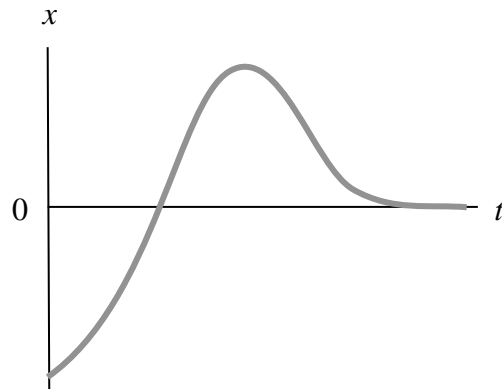

PHYS 1110 Group Work Sheet 2
Kinematics with changing velocity

With your group, discuss how to answer these questions and write your group answer in the space provided.

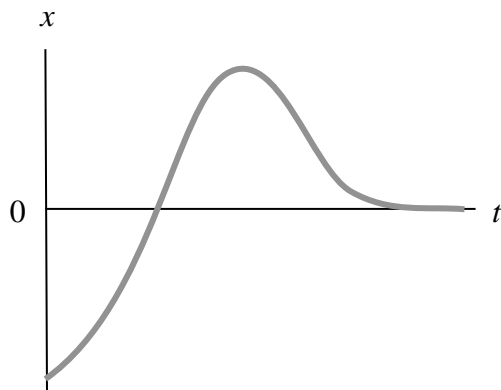
1a. Mark on the graph where position is positive, $x > 0$.



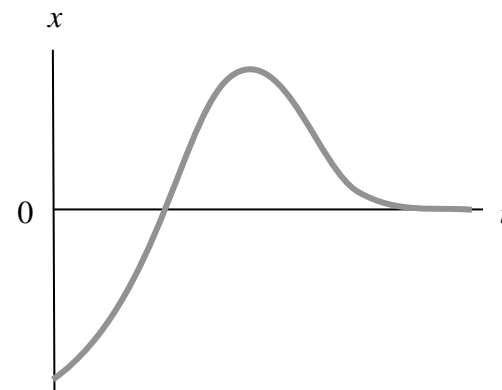
1b. Mark on the graph where position is negative, $x < 0$.



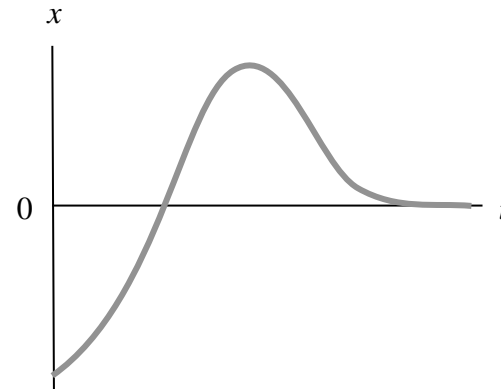
2a. Mark on the graph where velocity is positive, $v > 0$.



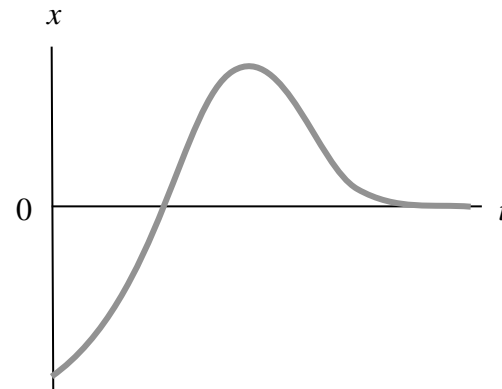
2b. Mark on the graph where velocity is negative, $v < 0$.



3a. Mark on the graph where acceleration is positive, $a > 0$.



3b. Mark on the graph where acceleration is negative, $a < 0$.



4. A car waits at a stop light for 5 seconds, smoothly accelerates to 15 m/s over 5 seconds, and then continues at 15 m/s.
- What is the car's velocity at 5 s?
 - What is the car's position at 5 s?
 - What is the car's position at 10 s?
 - What is the car's position at 15 s?