1. **(Challenge Problem)** Sam the Snake is driving her derby racer East across a parking lot. She gently runs over some candy bars that are piled up in the parking lot. For five seconds after running over the candy, Sam accelerates at a rate of 0.56 m/s^2 to the West. At the end of the five seconds, Sam's velocity is 14.8 m/s to the East. What was Sam's velocity right after she ran over the candy bars?

1. ① $t = 5s$, $a = 0.56\ m/s^2$ W, $v = 14.8\ m/s$ E
   ($a = -0.56$, $v = 14.8$)
   ② v_0
   ③ $v_0 = v - at$
   ④ $v_0 = 14.8 - (-0.56)(5)$
   $14.8 + (+2.8)$
   $= 17.6$
   ⑤ $v_0 = 17.6\ m/s$ E