1-2. A car travels along a straight road with the speed shown in the $v-t$ graph, where $v_0 = 2$ m/s and c follows a normal distribution $c \sim N(2, 0.2^2)$ m/s^2. Plot the $a-t$ graph and calculate the probability that the maximum speed v reaches 14 m/s.

Solution: $P(v > 14) = 0.023$