



NAME

DATE

PROBLEM: AP-4**GIVEN:**

The acceleration of a particle as it moves along a straight line is given by $a = (2t - 1) \text{ m/s}^2$, where t is in seconds. If $s = 1 \text{ m}$ and $v = 2 \text{ m/s}$ when $t = 0$, determine the particle's velocity and position when $t = 6 \text{ s}$. Also, determine the total distance the particle travels during this time period.

REQUIRED:**SOLUTION:**