Lecture Thirteen Practice

Practice problems for

Abstract. *Practice problems for Lecture Thirteen Content*

Problem. 1 : The position $s(t)$ of a robot moving along a track at time t is given by $s(t) = 8t^2 + 64t + 6$. What is the velocity $v(t)$ of the particle at time t?

$v(t) =$?

Problem. 2 : The position $s(t)$ of a robot moving along a track at time t is given by $s(t) = 9t^2 - 90t + 4$. What is the velocity $v(t)$ of the particle at time t?

$v(t) =$?

Problem. 3 :
At time $t = 0$, a cannonball is launched, with its height h in meters given by $h(t) = -5t^2 + 4t + 2$. At what time t does the cannonball reach its peak?

peak time $t =$?

Problem. 4 : At time $t = 0$, a cannonball is launched, with its height h in meters given by $h(t) = -5t^2 + 7t + 4$. At what time t does the cannonball reach its peak?

peak time $t =$?