

PROBLEMS

1. A particle of mass m moves in a straight line with constant acceleration a . It starts from rest at the origin O at time $t = 0$. Find the distance travelled in time t .

2. A particle starts from rest at the origin O and moves in a straight line with constant acceleration a . It passes through a point P at time t_1 and a point Q at time t_2 . Find the distance between P and Q .

3. A particle starts from rest at the origin O and moves in a straight line with constant acceleration a . It passes through a point P at time t_1 and a point Q at time t_2 . Find the time taken for the particle to travel from P to Q .

4. A particle starts from rest at the origin O and moves in a straight line with constant acceleration a . It passes through a point P at time t_1 and a point Q at time t_2 . Find the distance between P and Q .

5. A particle starts from rest at the origin O and moves in a straight line with constant acceleration a . It passes through a point P at time t_1 and a point Q at time t_2 . Find the time taken for the particle to travel from P to Q .

Time t	Distance s	Velocity v
0	0	0
t_1	$\frac{1}{2}at_1^2$	at_1
t_2	$\frac{1}{2}at_2^2$	at_2

LINGSTON

