

AP Physics 1

Velocity Practice Problem Answers

1.) $s = 25 \frac{\text{m}}{\text{s}}$

2.) $d = 120 \text{ km}$

3.) $t = 600 \text{ s}$

4.) $v_{av} = 26 \frac{\text{km}}{\text{h}}$

5.) $s = 6.4 \frac{\text{m}}{\text{s}}$

6.) $s = 16 \frac{\text{m}}{\text{s}}$

7.) $s = 12 \frac{\text{m}}{\text{s}}$

8.) $s = 48 \frac{\text{km}}{\text{h}}$
 $v_{av} = 0$

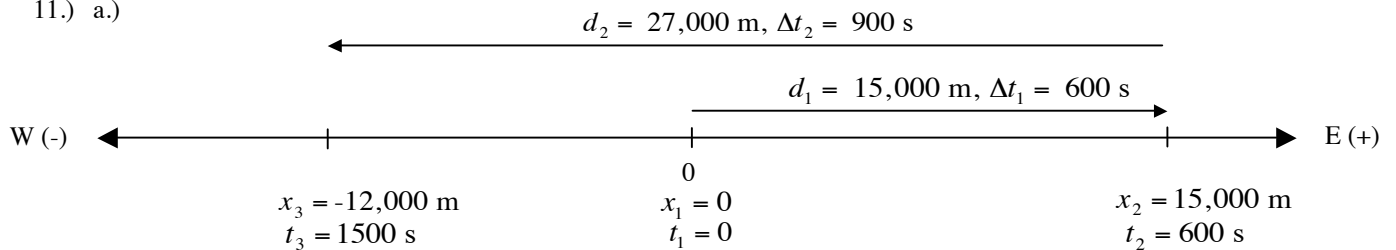
9.) (Show calculations for velocities)

Time Interval (seconds)	Distance Traveled (meters)	Velocity (m/s)
0 to 40 s	400	10
40 to 70 s	0	0
70 to 90 s	200	-10
90 to 100 s	200	-20

10.) (Show calculations for both)

Time Interval (seconds)	Displacement (meters)	Velocity (m/s)
0 to 20 s	100	5
20 to 40 s	300	15
40 to 100 s	750	12.5
0 to 100 s	1150	11.5

11.) a.)



b.) $v_{av} = -8 \frac{\text{m}}{\text{s}}$

c.) $s = 28 \frac{\text{m}}{\text{s}}$