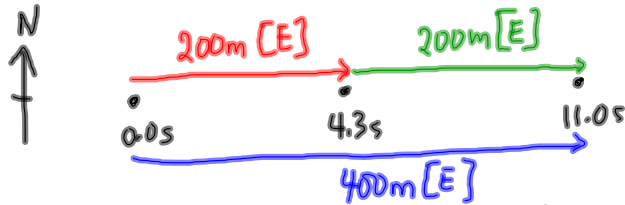




mp|42



a) $\Delta \vec{d} = 200\text{m}[\vec{E}]$ } G
 $\Delta t = 4.3\text{s}$ } R
 $\vec{V}_{\text{ave}} = ??$ } R

$\vec{V}_{\text{ave}} = \frac{\Delta \vec{d}}{\Delta t}$ ← A
 $\vec{V}_{\text{ave}} = \frac{200\text{m}[\vec{E}]}{4.3\text{s}}$ } S
 $\vec{V}_{\text{ave}} = 47\text{ m/s}[\vec{E}]$

The average velocity for the first 200.0m was 47 m/s [E].

b) $\Delta \vec{d} = 200.0\text{m}[\vec{E}]$
 $\Delta t = 11.0\text{s} - 4.3\text{s} = 6.7\text{s}$
 $\vec{V}_{\text{ave}} = ?$

$\vec{V}_{\text{ave}} = \frac{\Delta \vec{d}}{\Delta t}$
 $\vec{V}_{\text{ave}} = \frac{200.0\text{m}[\vec{E}]}{6.7\text{s}}$
 $\vec{V}_{\text{ave}} = 3.0 \times 10^1 \text{ m/s}[\vec{E}]$

The average velocity for the last 200.0m was $3.0 \times 10^1 \text{ m/s}[\vec{E}]$

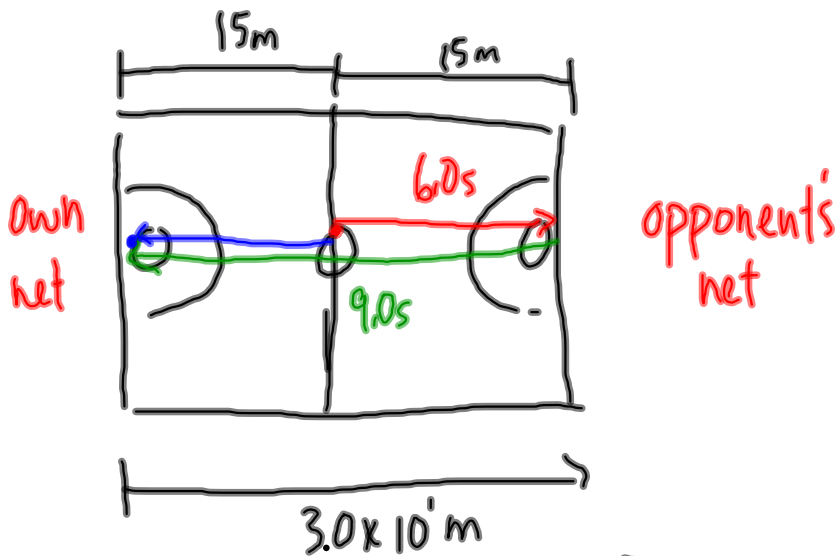
c) $\Delta \vec{d} = 400.0\text{m}[\vec{E}]$
 $\Delta t = 11.0\text{s}$
 $\vec{V}_{\text{ave}} = ??$

$\vec{V}_{\text{ave}} = \frac{\Delta \vec{d}}{\Delta t}$
 $\vec{V}_{\text{ave}} = \frac{400.0\text{m}[\vec{E}]}{11.0\text{s}}$ 3sd
 $\vec{V}_{\text{ave}} = 36.4\text{ m/s}[\vec{E}]$

The average velocity for the whole trip was 36.4 m/s [E]

NOTE: $V_{\text{ave}} \neq \frac{V_1 + V_2 + V_3 + V_4 + \dots + V_n}{n}$

MP/44



a) $\Delta \vec{d} = 15\text{m}$ [towards opp. net]
 $\Delta t = 6.0\text{s}$
 $\vec{V}_{\text{ave}} = ??$

$$\vec{V}_{\text{ave}} = \frac{\Delta \vec{d}}{\Delta t}$$

$$\vec{V}_{\text{ave}} = \frac{15\text{m} [\text{towards opp. net}]}{6.0\text{s}}$$

$$\vec{V}_{\text{ave}} = 2.5\text{m/s} [\text{toward opp. net}]$$

The average velocity was 2.5 m/s [tow. opp. net]

b) $\Delta \vec{d} = 30\text{m}$ [away from opp. net]
 $\Delta t = 9.0\text{s}$
 $\vec{V}_{\text{ave}} = ?$

$$\vec{V}_{\text{ave}} = \frac{\Delta \vec{d}}{\Delta t}$$

$$\vec{V}_{\text{ave}} = \frac{30\text{m} [\text{away fr. opp. net}]}{9.0\text{s}}$$

$$\vec{V}_{\text{ave}} = 3.3 \frac{\text{m}}{\text{s}} [\text{away fr. opp. net}]$$

The ave. vel of the player was _____

Rearranging $V = \frac{\Delta d}{\Delta t}$

Solve for Δd : $\Delta d = v \Delta t$

TO DO

① PP/45-46

② Velocity Review 6-13

Solve for Δt :

$$V = \frac{\Delta d}{\Delta t}$$
$$\frac{V \Delta t}{V} = \frac{\Delta d}{V}$$
$$\Delta t = \frac{\Delta d}{V}$$