KEY

Review - Graphical Analysis

Intro to Kinematics:

1.) magnitude, magnitude, direction

2.) straight line

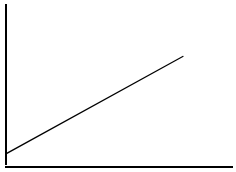
3.) Equal

4.) Vectors: displacement, force, $20.\frac{m}{s}$ $[N]$, velocity, $50.m$ $[down]$, $9.8\frac{m}{s^2}[down]$, acceleration, $10.km$ $[SW]$

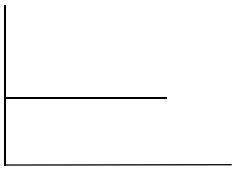
Scalars: $1.0\ kg$, $10.\frac{km}{h}$, distance, $200.km$, $5.0\ h$, $40.L$, mass, speed

Graphing Motion:

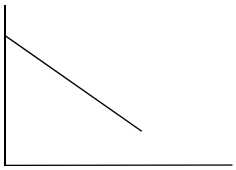
1.) Slope is the pitch or angle (steepness) of the line of a graph.



Positive



Zero



Negative

2.) Speed. Slope is rise/run and speed is distance/time.

Slope is rise/run and speed is metres/seconds.

3a.) no, y-intercepts are different b.) B c.) A d.) A has a steeper slope.

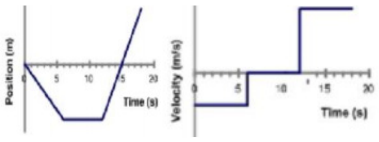
e.) A and B are at the same position.

4.) $2.5\ s$, $5.0\ s$, $20.m$, $10.m$, $4.0\frac{m}{s}$, $2.0\frac{m}{s}$

5a.) $0\ s$, $31\ s$, $55\ s$ b.) $15-20\ s$ c.) $20.-40.s$ d.) $4.0\frac{m}{s}$, $5.0\frac{m}{s}$ e.) $3.0\frac{m}{s}$ f.) 0

6. The ball doesn't move at first. Then it moves backwards and then finally stops.

7.



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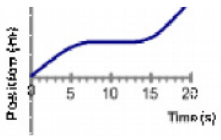

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