

Name _____

Pd _____

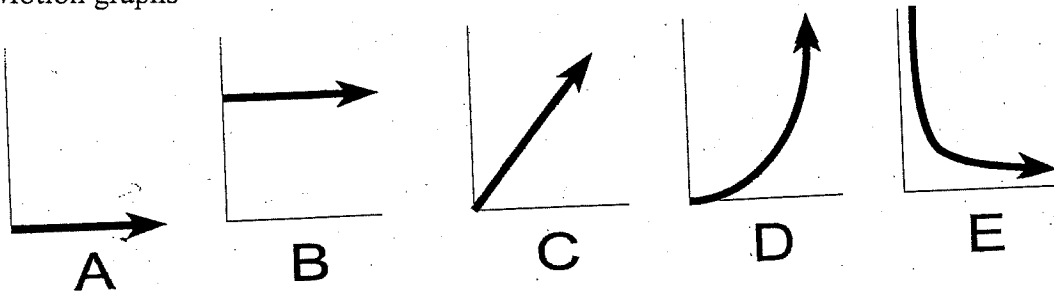
Unit 1

Physics Review

(answers online
smile2340.com)

Break into groups of four with two of the four on one team and two of the four on the other. Answer the following questions with your partner. When done with each part compare answers with the other group and discuss differences you may have. Answers will be provided at the end of the reviewing time.

Part I Motion graphs



Note above graphs

If graph A were a distance vs. time graph what would it be telling you?

If graph A were a velocity vs. time graph what would it be telling you?

If graph A were acceleration vs. time graph what would it be telling you?

If graph B were a distance vs. time graph what would it be telling you?

If graph B were a velocity vs. time graph what would it be telling you?

If graph B were acceleration vs. time graph what would it be telling you?

If graph C were a distance vs. time graph what would it be telling you?

If graph C were a velocity vs. time graph what would it be telling you?

If graph C were acceleration vs. time graph what would it be telling you?

If graph D were a distance vs. time graph what would it be telling you?

If graph D were a velocity vs. time graph what would it be telling you?

If graph D were acceleration vs. time graph what would it be telling you?

If graph E were a distance vs. time graph what would it be telling you?

If graph E were a velocity vs. time graph what would it be telling you?

If graph E were acceleration vs. time graph what would it be telling you?

What units could the slope of a line in a distance vs. time graph have?

What units could the slope of a line in a velocity vs. time graph have?

Discuss Part 1 with the other group before continuing.

Part 2 Fab Five Formulas and their units

What is the unit for a ?

What is the unit for s ?

What is the unit for v_i ?

What is the unit for t ?

What is the unit for v_f ?

What is another way to write a m/s per s or $m/s/s$?

What is a $(m/s - m/s)/s$?

What is a $(m/s + m/s)/2$ in units?

What is a m/s times a $s + \frac{1}{2} m/s^2$ times a s^2 in units?

What is the square root of $(2 \text{ times a } m/s^2 \text{ times a } m + (m/s)^2)$ in units?

Which fab five formula would you use if you needed to find (a) below and were given (b) below:

a). v_f b). v_i a s _____

a). a b). v_i v_f t _____

a). v_f b). v_i a t _____

a). v_{av} and the acceleration is not uniform over the trip b). t s _____

a). s b). free fall problem with an item dropped knowing only t _____

Discuss answers to part 2 with the other group.

Part 3

How would making the mass 4 times as much and making the surface area 25 times as much affect the $v_{terminal}$ of an object?