

Physics Final Exam Review Part 1

Your final exam will be 40 multiple choice questions covering chapters 2 – 5.

I will be posting practice questions for you to work every day this week.

Try working answering these questions and then view the solution videos.

$$x = v_0t + \frac{1}{2}at^2$$

$$V_f = v_0 + at \quad \text{which can be written as} \quad a = (v_f - v_0)/t$$

$$V_{ave} = \frac{1}{2}(v_f + v_0)$$

$$V_f^2 = v_0^2 + 2ax$$

$$V_{ave} = \Delta x/t$$

1. A fuzzy bear walks 25 meters in 100 seconds. What is the bears average speed?

- a. 1000 m/s
- b. 25 m/s
- c. 4 m/s
- d. .25 m/s

2. A car moving with an initial velocity of 20 m/s slows down and stops in 5 seconds.

What is the acceleration of the car while slowing down?

- A. -4 m/s/s
- B. -2 m/s/s
- C. -1 m/s/s
- D. 0 m/s/s

3. How far did the car in question 2 move while slowing down?

- a. 20 m

- b. 30 m
 - c. 40 m
 - d. 50 m
4. A car starting from rest, accelerates at 5 m/s^2 for 5 seconds. What is the velocity of the car in 5 seconds?
- a. 5 m/s
 - b. 10 m/s
 - c. 15 m/s
 - d. 20 m/s
 - e. 25 m/s
5. How far did the car in question 4 move?
- A. 12 m
 - B. 32.5 m
 - C. 62.5 m
 - D. 100 m
6. A ball, starting at rest, rolls down a 2 m long ramp and reaches the bottom of the ramp in 4 seconds. What is the average velocity of the ball?
- a. 8 m/s
 - b. 4 m/s
 - c. 1 m/s
 - d. .5 m/s
7. What is the velocity of the ball in question 6, when it reaches the bottom of the ramp?

- a. .5 m/s
- b. 1 m/s
- c. 1.5 m/s
- d. 2 m/s

8. What is the acceleration of the ball in question 6 ?

- a. .25 m/s/s
- b. 1 m/s/s
- c. 2 m/s/s
- d. 4 m/s/s