

# PHYS 210 - General Physics I

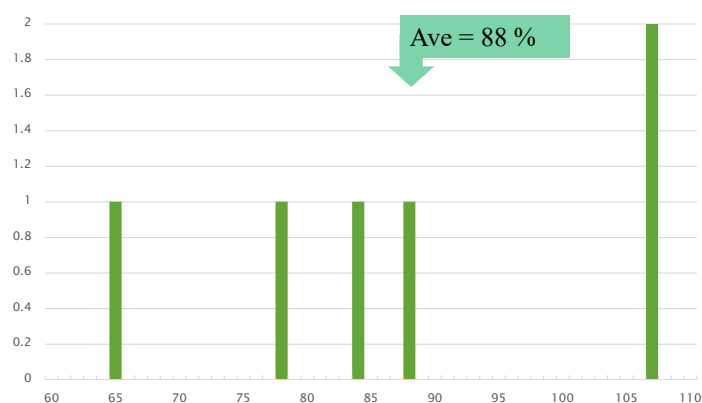
- Exam Results
- Projectiles
- Circular motion: an introduction
- Forces

## Exam I Results

12 Point Grading Scale

A	91	100
A-	88	90
B+	85	87
B	79	84
B-	76	78
C+	73	75
C	67	72
C-	64	66
D+	61	63
D	55	60
D-	52	54
F	0	51

EXAM I



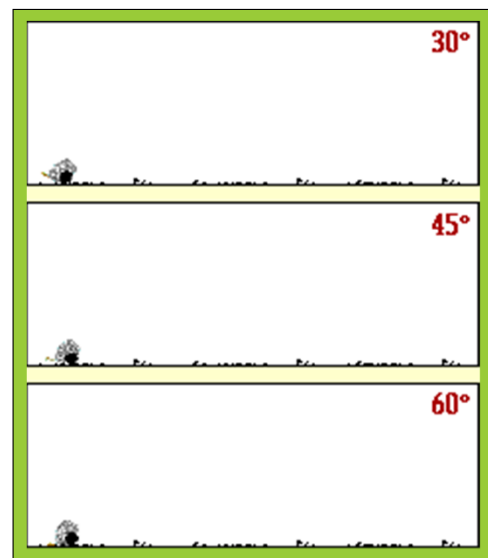
## EX: P 4.44

- ▶ A ball is thrown toward a cliff of height  $h$  with a speed of 30 m/s and an angle of  $60^\circ$  above the horizontal. It lands on the cliff 4.0 s later.
- ▶ A. How high is the cliff?
- ▶ B. What is the max height of the ball?
- ▶ C. what is the ball's impact speed?

## Motion in 2-D: Projectile Motion

- ▶ The horizontal range,  $R$ , is given by
  - $R = (v_o^2/g) \sin(2\theta_o)$
  - What angle gives the maximum value of  $R$ ?

$$\theta = \frac{\pi}{4}$$



## EX: P 4.41

- ▶ A projectile is fired with an initial speed of 30 m/s and an angle of  $60^\circ$  above the horizontal. The object hits the ground 7.5 s later.
- ▶ A. How much higher or lower is the launch point relative to the point where the projectile hits the ground?
- ▶ B. What is the velocity of the projectile when it hits the ground?

Happy Monday!

