Review Day

- Please take out your calculator, a pencil and your notebook.

- On your whiteboard: write a problem from the homework that you would like to see solved or any kind of 1-D problem (horizontal or vertical) that you would like to have reviewed.

- 3 groups to catch the falling man, have your calculations out.

Requested Homework

The length of the barrel of a blowgun is 1.2 meters. Upon leaving the barrel, a dart has a speed of 14 m/s. Assuming that the dart is uniformly accelerated, how long does it take for the dart to leave the length of the barrel?

Sponge Bob rides a starfish. He accelerates at ____m/s^2 to hold the wheelie. After ____ seconds he finishes accelerating at ____m/s. How fast was he going when he started accelerating?

An old VW Beetle goes for 0 to ___ m/s with an acceleration of ____ m/s^2. How long does it take for Beetle to reach this speed? How far did the Beetle travel while accelerating?

A blue car travels at a constant velocity of 27m/s. As it passes an onramp, a red car accelerates from rest at a constant acceleration. If the red car **catches** the blue car 1800m away, what is the red car's acceleration?

Falling Man

Cooties have been spotted jumping into the air with initial velocities of 60 m/s.
What is the maximum height of the cootie?

Cooties have been spotted jumping into the air with initial velocities of 60 m/s.
What is the position of the cootie at 9 seconds?

What is the cootie's velocity at the maximum height?

What is the acceleration of the cootie at maximum height?

Cooties have been spotted jumping into the air
with initial velocities of 60 m/s.
What is the distance traveled after 10 seconds?

A new freshman at University looks out his dorm window to perform his own physics test. He heaves water balloons onto unsuspecting passers-by with an initial velocity of ___ m/s down. His window is 14 meters above the ground. What is the velocity of the balloon as it hits the pavement if he misses?

A new freshman at University looks out his dorm window to perform his own physics test. He heaves water balloons onto unsuspecting passers-by with an initial velocity of ___ m/s down. If he hits a student that is 1.8m tall, how fast is the balloon going? How long does it take to get there?