Chapter Five Review (5-2)

Acceleration

1. Sara falls from a 67 m cliff. a) What velocity does she hit at? b) How long does it take her to hit?

2. A physics book is thrown upward at 55 km/hr. a) How high does it go? b) How long does it take to go to the top of its flight?

3. A physics student driving at 85 km/hr enters a speed trap and slows to 55 km/hr is 2.3 seconds. a) What is his/her acceleration? b) How far did the car travel during the slowing period? c) If the radar locks on after 1.1 seconds of the deceleration what is the car's speed? d) ticket?

4. A drag car gets up to 115 miles/hr in a ¼ mile track. a) How long does the run take? b) What is the car's acceleration? (1 mile = 1610 m)

5. A special bullet accelerates to 565 m/s in a 1.2 m barrel. a) how long was the bullet in the barrel? b) What is the bullet's acceleration?

6.A *klutz-y* runner traveling at 3.20 m/s trips and falls and comes to rest in 1.98 seconds. a) What is her deceleration? b) How far does she slide?

7. A rubber band can accelerate a rock at 66 m/s^2. A) How fast does the rock leave the sling shot at (above rubber band attached to sling shot) if the rubber band pushes on the rock for .070 seconds? b) How high will it go if it is shot straight up?