

Acceleration HW

- 1) You have not had lunch yet and spot a hot dog vendor down the block. You are initially walking at 2.0 m/s and accelerate up to a velocity of 3.2 m/s in 8.0 sec 's. What is your rate of acceleration?
- 2) The acceleration due to gravity on Krypton is 19.2 m/s^2 . If Kal-El begins at rest and is knocked off a hill and falls for 4.3 seconds what is his final velocity?
- 3) Mr. G's 2008 Lexus starts at a velocity of 12 m/s accelerates at a rate of 4.3 m/s^2 up to a velocity of 20 m/s . How long did this take?
- 4) An asteroid traveling at 200 m/s enters Jupiter's atmosphere and is accelerated up to a velocity of 666 m/s in 7.0 sec . What is the rate of acceleration on Jupiter?
- 5) A fire bolt is sent out of an imp with an initially velocity of 23 m/s as it travels through the air it slows down at a rate of 2.8 m/s^2 how long does it take for the bolt to stop?

6) A griffin begins traveling @ 17 m/s E and accelerates @ a rate of $2.4\text{ m/s}^2\text{ E}$ for 7.2 sec . How far does it travel?

7) A chicken is thrown 220 m N after beginning @ rest and travels for 12.2 seconds what is its rate of acceleration?

8) A car drives for 14 sec and accelerates @ 2.0 m/s^2 covering 512 m . What was its initial velocity?