

# Physics 231 - 3-Sep-99



- Displacement
- Graphs
- Speed and Velocity
- Quiz

# Displacement



- $x = x - x_0$       Position displacement
  - Can be positive or negative
- $t = t - t_0$       Time Displacement

# Graphs of displacement vs time



- Stationary object
- Object moving with constant speed
- Object whose speed is increasing or decreasing with time

# Speed



- Average Speed

- Instantaneous Speed

# Velocity



- Average Velocity

- Instantaneous Velocity

Q1 - Answer = c

Q2 - Problem A - Last name A-K

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- A foot = 12 inches and 1 in = 2.54 cm. How many  $\text{cm}^2$  in a square area 1 foot on a side?
  - a) 144
  - b) 30.5
  - c) 929
  - d) 6.45
  - e) 366

Q1 - Answer = c

Q2 - Problem B - Last Name L-Z

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- A square area 1 mile on a side contains 640 acres. Recalling that 1 mile = 1.6 km and 1 km =  $10^3$  m, how many  $m^2$  in an acre?
  - a) 4,000
  - b) 2.5
  - c) 610
  - d) 25
  - e) 2,560