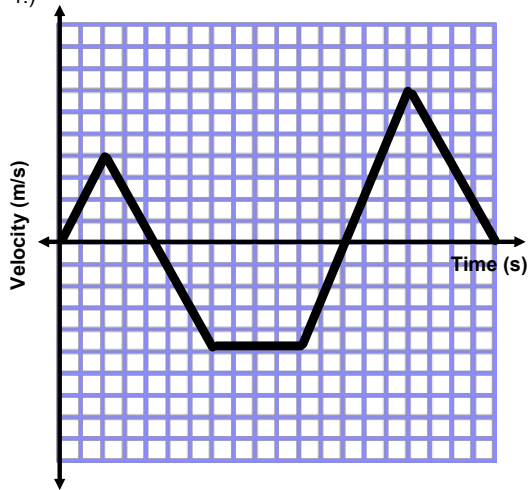# Physics 112: Motion Pre-Quiz Practice

1.)

a) At what time(s) did the direction of the object change?

b) Calculate the acceleration between 2 and 7 sec?

c) Calculate the average speed and velocity for the full 20 seconds.

2.) A car, initially driving 22 m/s [W], accelerates to 35 m/s [E] in 75 seconds.

a) Calculate the acceleration of the car.

b) Calculate the final displacement of the car (assume the initial displacement is zero).

3.) Standing at the ledge of a 250 m building, an old computer is thrown upwards with an initial velocity of 36 m/s.

a) Calculate the time it will travel upwards.

b) Calculate the maximum height of the old CPU above the ground.

c) Calculate the velocity of the old CPU when it is 50 m above the ground.

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