SHM & SHO Name:

Worksheet 2

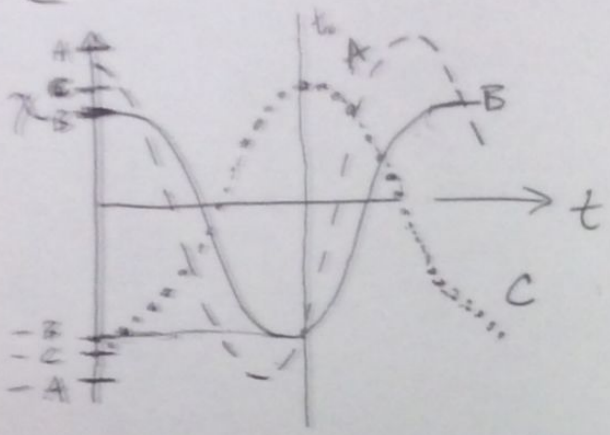
(1) A block of mass 1 kg is attached to the end of a relaxed Hooke's law spring, then released from rest, and begins to oscillate up and down. The spring has a force constant of $k = 100\ N/m$.

a) What is the resultant oscillation amplitude?

b) What is the average speed of the mass in one period?

SHM

(2)



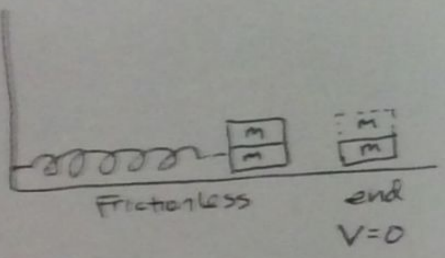
3 Identical spring and mass S.H.O.s are set into oscillation by 3 students. Rank from high to low:

a.) T b.) f c.) PE at t_0

d.) KE at t_0 e.) PE_{max}

f.) KE_{max} g.) Total Mechanical Energy

(3)



At end point the top m is removed. By what factor does each of the following change?

T f Total Energy KE_{max} PE_{max}

V_{max} X_{max}