Kinematics Wkst 2 Answers

1. Vi=0 mph A=v/t =(60mph-0 mph)/5 sec 12 mph/s

Vf=60 mph

t=5 seconds

A=?

1. A=4mph/s t=(Vf-Vi)/A =(60 mph-20 mph)/4 mph/s 10 seconds

Vi=20 mph

Vf=60 mph

t=?

1. Vi=0 m/s Vf=Vi + A\*t =0 m/s + 3 m/s/s \* 4.5 seconds 13.5 m/s

A=3 m/s/s

t=4.5 seconds

Vf=?

1. Vi=36 km/hr A=(Vf-Vi)/t =(0-36 km/hr)/6 seconds -6 km/hr/s

Vf=0 km/hr

t=6 seconds

A=?

1. Do not do.
2. A=16 m/s/s t=SQR(2\*D/A) =SQR(2\*800 m/16 m/s/s)= 10 seconds

D=800 m

t=?

1. Do not do
2. Vi=10 m/s A=(Vf-Vi)/t =(40 m/s -10 m/s)/5 seconds 6 m/s/s

Vf=40 m/s

t=5 seconds

A=?

1. Do not do
2. D=44.1 m A=2\*D/t2 =2 \* 44.1 m/(3 seconds)2 9.8 m/s/s

t=3 seconds

A=?