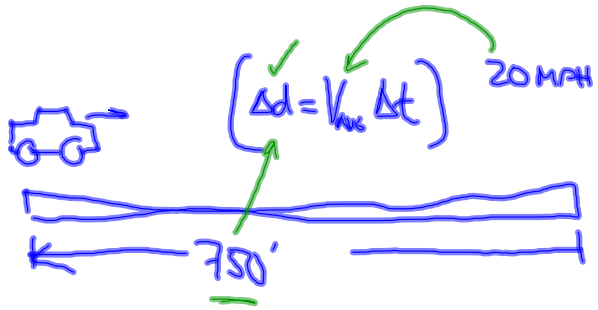
ASSUMING THAT THE FRONT WALL IS 750' LONG, WHAT'S THE MINIMUM TIME ONE MUST USE WHEN DRIVING THE ENTIRE LENGTH W/O SPEEDING?



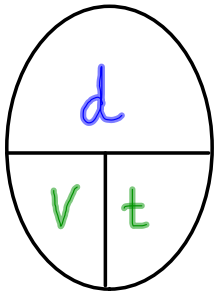

$$\frac{\Delta d}{V_{AVG}} = \frac{V_{AVG}(\Delta t)}{V_{AVG}} \qquad \Delta t = \frac{\Delta d}{V_{AVG}} = \frac{750\,FT}{20\,\frac{Miles}{Hr}}$$

NEED TO CONVERT MPH TO FT/S

$$\left[20\,\frac{Miles}{Hr}\right]\left[\frac{5280\,FT}{Mile}\right]\left[\frac{Hr}{3600\,S}\right] \longrightarrow = 29.\bar{3}\,\frac{FT}{S}$$

$$\Delta t = \frac{750\,FT}{29.3\,Ft/s} = 25.59\,S$$

$$d = vt \qquad \Delta d = V_{AVG}\,\Delta t$$




$$d = vt$$

$$t = \frac{d}{v}$$

$$V = \frac{d}{t}$$

$a \neq A$

$a$ ↑ ACCELERATION

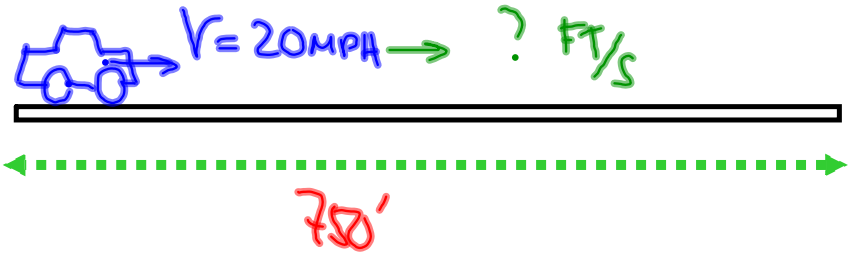
$A$ ↑ AMPLITUDE, AREA, AMPERES

$a = g =$ ACCELERATION OF GRAVITY $= -\left[9.81 \frac{\frac{M}{S}}{S}\right]$

$= -9.81\ M/S^2$

ASSUMING THE FRONT WALL IS 750' LONG - WHAT'S THE MINIMUM TIME ONE MUST USE WHEN DRIVING BY - W/O SPEEDING?

S.L = 20 MPH




$$\left[\frac{20\ \text{Miles}}{\text{Hr}}\right]\left[\frac{5280\ \text{FT}}{\text{Mile}}\right]\frac{\text{Hr}}{3600\ \text{S}} = 29.3\ \frac{\text{FT}}{\text{S}}$$

$$d = vt \qquad t = \frac{d}{v} = \frac{750\ \text{FT}}{29.3\ \text{FT/S}}$$

$$t = 25.5\ \text{S}$$

$a$ => ACCELERATION $\neq A$

AREA

AMPLITUDE

AMPERES

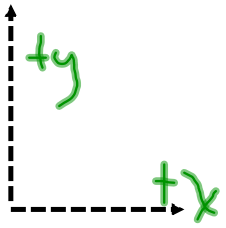
$$a = \frac{\Delta v}{\Delta t}$$

$g$ = acceleration due to gravity on EARTH

$= -9.81 \ m/s/s$

MAGNITUDE

DIRECTION

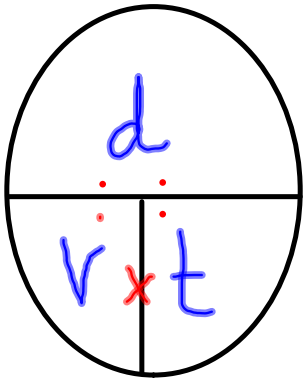



$$Weight = mg$$

S.G. for FIRST TEST on 10.5.05

CONVERSIONS / FLM / $d=vt$ / "a"

( KILO = 1000
Milli = 1/1000
Centi = 1/100




$d=vt$

$t=\frac{d}{v}$

$v=\frac{d}{t}$

$v=V_{AVG}=\frac{\text{TOTAL DIST}}{\text{TOTAL TIME}}$

WORK ON TEST

1

$d = vt$

$v = 5\,m/s$

$t = 3\,s$

$\therefore d = 15\,m$