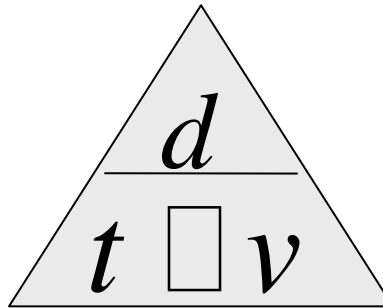


Formula Sheet #1

Constant Velocity



$$d = tv$$

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

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

FPS / MPH Conversion:

$$ft / sec = (1.467)mi / hr$$

$$mi / hr = \frac{ft / sec}{1.467}$$

Drag Factor Equations:

$$f = \frac{F}{w}$$

$$f = \frac{a}{g}$$

$$f = \frac{v_i^2}{2gd}$$

(Skid to stop only.)

Radius / Critical Curve:

$$r = \frac{l^2}{8h} + \frac{h}{2}$$

$$v = \sqrt{g r f}$$

Legend of Symbols:

a: Acceleration *d*: Distance *F*: Force *f*: Drag Factor

g: Gravity *G*: Grade *h*: Height *l*: Length

t: Time *v*: Velocity *w*: Weight

"32.2"