Distance	**gravity**	**formulas**	**formulas**	**Forces**
1 mile = 5,280 ft	1 g = 32 ft/s²	$\Delta S = V_0 t + 1/2 a t^2$	$\Delta Y = V_{0y} t + 1/2 a_y t^2$	Weight = mg 1.0 lb.= 4.445 N
1 ft. = 12 inches	1 g = 9.8 m/s²	$V_f = V_0 + at$	$V_{fy} = V_{0y} + a_y t$	1.0 slug= 14.59 kg
1 meter = 100 centimeters		$\Delta S = \frac{V_f^2 - V_0^2}{2a}$	$\Delta Y = \frac{V_{fy}^2 - V_{0y}^2}{2a_y}$	friction force = μN μ=coefficient of fric N=Normal Force
1 meter = 1,000 millimeters	1.0 ft= 0.305 m		$\Delta X = V_{0x} t$	British: Forces in pounds mass in slugs
1 Kilometer = 1,000 meters	Normal is ⊥ to surface		$V_{fx} = V_{0x}$	Metric: Forces in Newtons Mass in kg