1. Base Equation: $v = \frac{d}{t}$  
$v = 123 \text{ m/s}$  
$t = 5 \text{ s}$  
$d = ?$

2. Base Equation: $v_f = v_i + at$  
$v_f = 32 \text{ m/s}$  
$v_i = 0$  
$a = 8.0 \text{ m/s}^2$  
$t = ?$

3. Base Equation: $\frac{1}{2}mv^2 = mgh$  
$g = 9.80 \text{ m/s}^2$  
$h = 875 \text{ m}$  
$v = ?$

4. Base Equation: $F = \frac{Gm_1m_2}{r^2}$  
$F = 132 \text{ N}$  
$G = 6.67 \times 10^{-11} \text{ Nm}^2/\text{kg}^2$  
$r = .243 \text{ m}$  
$m_1 = 1.175 \times 10^4 \text{ kg}$  
$m_2 = ?$
5. Base Equation: \[ v = \sqrt{2gr_e} \] 
\[ v = 1.12 \times 10^4 \text{ m/s} \quad g = 9.80 \text{ m/s}^2 \quad r_e = ? \]

6. Base Equation: \[ F_c = \frac{mv^2}{r} \] 
\[ F = 1680 \text{ kgm/s}^2 \quad m = 125 \text{ kg} \quad r = 9.00\text{ m} \]
\[ v = ? \]

7. Base Equation: \[ T = \frac{2\pi \sqrt{L}}{g} \] 
\[ T = 2.94 \text{ s} \quad L = 2.15 \text{ m} \quad g = ? \]