

# HW14a

Monday, October 3, 2016 2:49 PM

$$1. K_A - K_P = -\frac{2}{3} \frac{GMm}{D}$$

$$3. E = -\frac{GMm}{4R}$$

$$2. v_{esc} = \sqrt{\frac{GM}{R}} \quad v = \frac{9}{4} R$$

$$4. v_f = \sqrt{v_L^2 - \frac{9}{4} \frac{GM}{R}}$$

$$F_{net} = -\frac{3}{25} \frac{GMm}{R^2}$$

$$x = \frac{20}{3} R$$