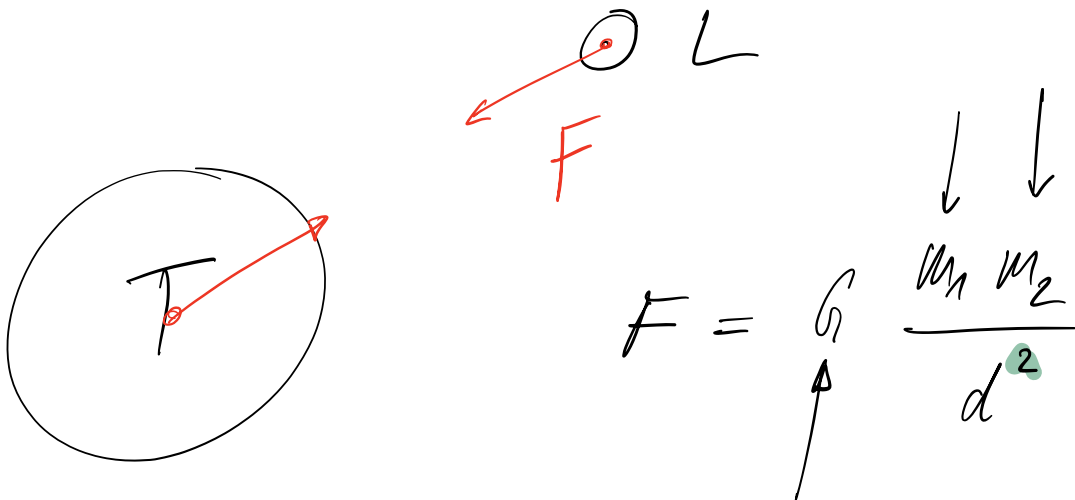




$$m_1 = m_T$$

$$m_2 = m_L$$

$$G = 7 \cdot 10^{-11}$$

$$d = 400\,000\,000$$

$$m_T = 6 \cdot 10^{24}$$

$$d = 4 \cdot 10^8$$

$$m_L = 7 \cdot 10^{22}$$

$$F = 7 \cdot 10^{-11} \cdot \frac{6 \cdot 10^{24} \cdot 7 \cdot 10^{22}}{(4 \cdot 10^8)^2}$$

$$= \frac{7 \cdot 6 \cdot 7}{16} \cdot \frac{10^{24+22-11}}{10^{16}}$$

$$= 18,375 \cdot 10^{19} \approx 1,84 \cdot 10^{20}$$

$$x^2 + 5 = 230$$

$$x^2 + 5 - 230 = 0$$

$$x^2 - 225 = 0$$

$$2) 1 \cdot x^2 + 0x - 225 = 0$$

$$\boxed{a=1} \quad \boxed{b=0} \quad \boxed{c=-225}$$

$$\Delta = 0^2 - 4 \cdot 1 \cdot (-225)$$

$$= 900$$

$$x = \frac{-0 \pm \sqrt{900}}{2} =$$

$$\frac{30}{2} = 15$$

$$-\frac{30}{2} = -15$$

$$\boxed{\begin{array}{l} 2x^2 + bx + c \\ x = \frac{-b \pm \sqrt{\Delta}}{2a} \\ \Delta = b^2 - 4ac \end{array}}$$