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Materia: Submodulo 2

PASIÓN POR EDUCAR

Grupo: BEN01SDM0120-A

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EJERCICIOS

1:

$$m_1 = 800 \text{ kg}$$

$$m_2 = 500 \text{ kg}$$

$$d = 3 \text{ metros}$$

$$g = -9.8 \text{ m/s}^2$$

$$F = ?$$

$$F = \frac{(-9.81 \text{ m/s}^2) (800 \text{ kg} + 500 \text{ kg})}{3 \text{ m}^2}$$

$$F = \frac{-392,4000}{9 \text{ m}}$$

$$F = -436,000 \text{ N}$$

2:

$$m_1 = 342 \text{ kg}$$

$$m_2 = 350 \text{ kg}$$

$$d = 7 \text{ metros}$$

$$g = -9.81 \text{ m/s}^2$$

$$F = ?$$

$$F = \frac{(-9.81) (342 \text{ kg} + 350 \text{ kg})}{7^2 \text{ m}}$$

$$F = \frac{-1,174,257}{49}$$

$$F = -23964.42$$

3:

$$m_1 = 1 \text{ kg}$$

$$m_2 = 1 \text{ kg}$$

$$d = ?$$

$$g = -9.81 \text{ m/s}^2$$

$$\text{Fuerza} = 1 \text{ Newton}$$

$$d = \sqrt{\frac{(-9.81)(1)}{1}}$$

$$d = \sqrt{-9.81}$$

$$d = 3.13$$

$$m_1 = 65 \text{ kg}$$

$$m_2 = 71 \text{ kg}$$

$$g = -9.81 \text{ m/s}^2$$

$$F = ?$$

$$d = 9.3 \text{ m}$$

$$F = \frac{(-9.81) (65 + 71)}{9.3^2}$$

$$F = \frac{-45273.18}{86.49}$$

$$F = -523.44$$

$$m_1 = 50$$

$$m_2 = 56$$

$$F = 3.3 \text{ N}$$

$$g = -9.81 \text{ m/s}^2$$

$$d = ?$$

$$d = \sqrt{\frac{(-9.81) (50 + 56)}{3.3 \text{ N}}}$$

$$d = \sqrt{\frac{-27468}{10.89}}$$

$$d = \sqrt{-2522.31}$$

$$d = 91.23$$