Answer on Question #76297 Physics / Other

Two spheres sl objects have masses of $m_1 = 1.5 \times 10^5$ kg and $m_2 = 8.5 \times 10^2$ kg. Their centers are separated by a distance of $r = 2500$ m. Find the gravitational attraction between them.

Solution:

The gravitation force

$$F = G\frac{m_1 m_2}{r^2}$$

$$F = 6.67 \times 10^{-11}\ \frac{1.5 \times 10^5 \times 8.5 \times 10^2}{2500^2} = 1.36068 \times 10^{-9}\ \text{N}$$

Answers: 1.36068×10^{-9} N