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$$F = G \frac{Mm}{r^2} \text{より、} \quad (\text{万有引力の法則})$$

$$G = 6.67 \times 10^{-11} \text{ N} \cdot \text{m}^2 / \text{kg}^2, \quad M = 158 \text{ kg}, \quad m = 738 \times 10^{-3} \text{ kg}$$

$r = 0.4 \text{ m}$  を代入して、

$$\begin{aligned} F &= 6.67 \times 10^{-11} \cdot \frac{158 \cdot 738 \times 10^{-3}}{0.4^2} \\ &= 4.86 \times 10^{-8} \text{ N} \end{aligned}$$