

Moderna - Complementaria
Quiz 3
September 17, 2025

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$$\left\{ \begin{array}{l} \frac{0.125 H_0 k_z \mu \omega \left(\frac{a^4 n^3 \pi \sin\left(\frac{2bm\pi}{a}\right)}{2} + a^3 b m n^3 \pi^2 - \frac{a^3 b n^2 \left(\cos\left(2\pi\left(\frac{an}{b} - \frac{bm}{a}\right)\right) - \cos\left(2\pi\left(\frac{an}{b} + \frac{bm}{a}\right)\right) \right)}{8} - \frac{a^2 b^2 m n \pi \left(m \sin\left(\frac{2bm\pi}{a}\right) + n \sin\left(\frac{2an\pi}{b}\right) \right)}{2} + a b^3 m^3 n \pi \right)}{a^2 b^2 h^4 m n} \\ \frac{0.25 H_0 k_z m \mu \omega \pi \left(-\frac{a \sin\left(\frac{2bm\pi}{a}\right)}{2} + b m \pi \right)}{a h^4} \\ \frac{0.25 H_0 k_z \mu n \omega \pi \left(a n \pi - \frac{b \sin\left(\frac{2an\pi}{b}\right)}{2} \right)}{b h^4} \\ 0 \end{array} \right.$$

$$\left\{ \begin{array}{l} \frac{0.25 H_0 k_z \mu n \omega \pi \left(a n \pi - \frac{b \sin\left(\frac{2an\pi}{b}\right)}{2} \right)}{b h^4} \\ 0 \end{array} \right. \quad \begin{array}{l} \text{for } \frac{n\pi}{b} \neq 0 \\ \text{otherwise} \end{array}$$

$$\left\{ \begin{array}{l} \frac{0.25 H_0 k_z m \mu \omega \pi \left(-\frac{a \sin\left(\frac{2bm\pi}{a}\right)}{2} + b m \pi \right)}{a h^4} \\ 0 \end{array} \right. \quad \begin{array}{l} \text{for } \frac{m\pi}{a} \neq 0 \\ \text{otherwise} \end{array}$$