Math 3363 Fall 2015 Homework 1 Suggestions

Study the PDE Help Files.

Problem 4. Note that the boundary conditions are equivalent to

\[ 1 \cdot \varphi(0) + 0 \cdot \varphi'(0) + 0 \cdot \varphi(L) + 0 \cdot \varphi'(L) = 0 \]
\[ 0 \cdot \varphi(0) + 0 \cdot \varphi'(0) + 0 \cdot \varphi(L) + 1 \cdot \varphi'(L) = 0 \]

Problem 7. Note that

\[ \cos z = 0 \]

if and only if

\[ z = (k - \frac{1}{2})\pi \]

for some integer \( k \).