To meet these boundary conditions take $\delta_+ = \delta_- = 0$.

and $(e^2, n^+)\, C_+ + (e^2, n^-)\, C_- = 0 \quad \Rightarrow \quad C_+ = -A\,(e^2, n^-)$

$$C_- = A\,(e^2, n^+)$$

Then

$$\Theta_1 = A\left[-(e^1, n^+)(e^2, n^-)\cos\omega_+ t + (e^1, n^-)(e^2, n^+)\cos\omega_- t\right]$$

$$\Theta_2 = A\left[-(e^2, n^+)(e^2, n^-)\cos\omega_+ t + (e^2, n^-)(e^2, n^+)\cos\omega_- t\right]$$

Putting in the coefficients $\Rightarrow$

$$\Theta_1 = A\Big[\left\{(2l^2)\left[(m_1+m_2) + \sqrt{m_2(m_1+m_2)}\right]\right\}^{-\frac{1}{2}}\left\{(2l^2)\left[(m_1+m_2) - \sqrt{m_2(m_1+m_2)}\right]\right\}^{-\frac{1}{2}}\sqrt{\frac{m_1+m_2}{m_2}}$$

$$\otimes \cos\omega_+ t + \left\{(2l^2)\left[m_1+m_2 - \sqrt{m_2(m_1+m_2)}\right]\right\}^{-\frac{1}{2}}\left\{(2l^2)\left[(m_1+m_2) + \sqrt{m_2(m_1+m_2)}\right]\right\}^{-\frac{1}{2}}$$

$$\otimes \sqrt{\frac{m_1+m_2}{m_2}}\cos\omega_- t\Big],$$

or