Maximum number of internal nodes using height $(Ih) = 2^h - 1$ $(In) = 2^h - 1$

Maximum number of external nodes using height $(Eh) = 2^h$ $(Ex) = 2^h$

Maximum number of total nodes using height $(Th) = (Th)$ $(Tn) =$
$(Eh) + (Ih) = 2^h + 2^h - 1$ $(Ex) + (In) = 2^h - 1 + 2^h$

$= 2^h + 2^h - 1$

$= (2 \cdot 2^h) - 1$

Maximum number of internal nodes using level $(El)$
$(Il) = 2^{l-1} - 1$ $(In) = 2^{l-1} - 1$

Maximum number of external nodes using level $(El)$
$= 2^{l-1}$ $(Ex) = 2^{l-1}$

Maximum number of total nodes using level $(Tl)$
$(Tn) = (Ex) + (In)$
$= (El) + (Il) = 2^{l-1} + 2^{l-1} - 1 = (2 \cdot 2^{l-1}) - 1$