## $\begin{array}{c} {\rm Physics}~410 \\ {\rm Assignment}~\#7:~{\rm Due~Monday,~November}~18,~2013 \end{array}$

1) Find the electric potential inside a rectangular, two conductor, waveguide with the cross section shown below. Assume that the inner conductor is at a potential of 18 V and the outer one is grounded. In addition, find the capacitance. Do all calculations for aspect ratio a/b = 3/2. Attach a printout of your code, a discussion of your method and assumptions, and a discussion of your results, including an analysis of error. Provide data and graphs as needed.

