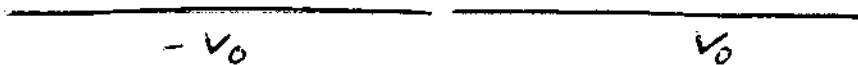


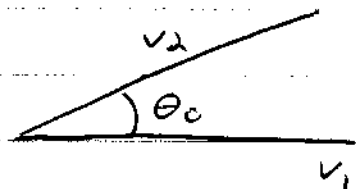
EM S'04 #9; S'03 #9

Find the potential above the plane:

infinite planes



This is just a wedge potential problem with the opening angle being $\theta_0 = \pi$:



The general solution according to C. Wong is:

$$V(\theta) = A + B\theta; \quad A = V_1; \quad B = \frac{V_2 - V_1}{\theta_0}$$

So we have $V_1 = V_0$; $V_2 = -V_0$ and $\theta_0 = \pi$

$$V(\theta) = V_0 + \frac{(-V_0 - V_0)}{\pi} \theta = V_0 \left(1 - \frac{2\theta}{\pi} \right)$$