

Q3.1 Yes  $330\ \Omega$  &  $2.4\ \text{k}\Omega$  can work  
but  $3.3\ \text{k}\Omega$  &  $24\ \text{k}\Omega$  are better  
as they draw less power.

$$V_o = \frac{3.87}{28.15} (x - (-12))$$

@  $x = -12\ \text{V}$ :  $V_o = 0\ \text{V}$

$x = 12\ \text{V}$ :  $V_o = 3.30$

$\therefore 3.87\ \text{k}\Omega$  &  $28.15\ \text{k}\Omega$  work

but are not E12  $\therefore 3.3\ \text{k}\Omega$  &  $24\ \text{k}\Omega$   
are better.