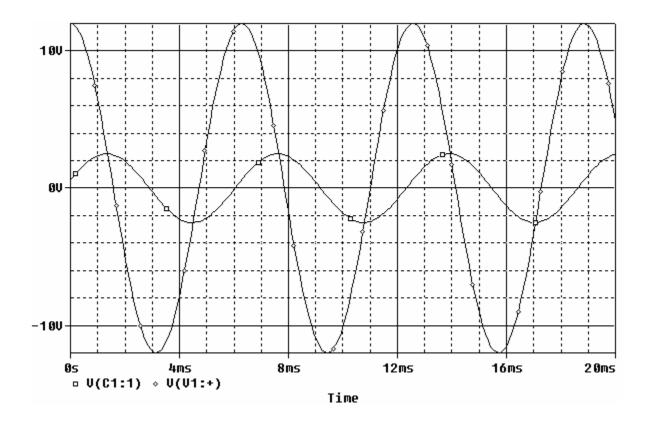
## Front

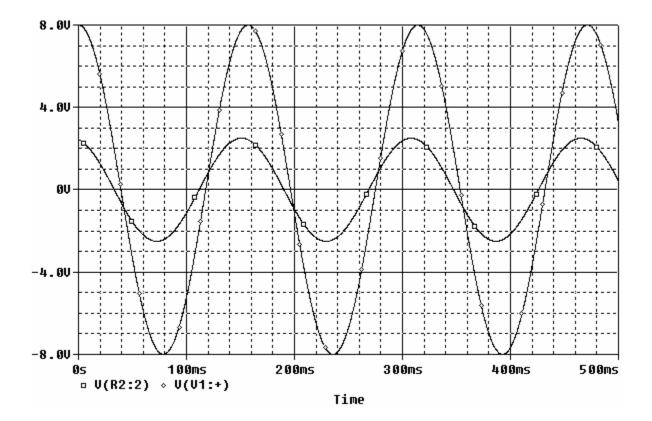
Design a circuit having one input,  $v_i(t)$ , and one output,  $v_o(t)$ . When the smaller of the sinusoids shown below is used as the input, the steady-state output must be the larger of the sinusoids.



Some points on the input plot:  $v_i(0.00132) = 2.5 \text{ V} (\max v_i)$  and  $v_i (0.00446) = -2.5 \text{ V} (\min v_i)$ ;  $v_i (0) = 0.6048 \text{ V}$ .

## Back

Design a circuit having one input,  $v_i(t)$ , and one output,  $v_o(t)$ . When the smaller of the sinusoids shown below is used as the input, the steady-state output must be the larger of the sinusoids.



Some points on the input plot:  $v_i (0.0722) = -2.5 \text{ V} (\min v_i)$  and  $v_i (0.151) = 2.5 \text{ V} (\max v_i)$ ;  $v_i (0) = 2.43 \text{ V}$ .