ATM 211

Skew-T assignment #3:

Name:

Using your Skew-T, solve the following problems:

1. $T = 16^{\circ}C$, $T_d = 9^{\circ}C$ at 980 mb

 $w = \underline{\hspace{1cm}} \quad w_s = \underline{\hspace{1cm}} \quad RH = \underline{\hspace{1cm}} \quad LCL = \underline{\hspace{1cm}} \quad T_w = \underline{\hspace{1cm}}$

 $\theta =$ _____ $\theta_{\rm e} =$ _____ $T_{\rm e} =$ _____

 T_{parcel} at 450 mb = _____ T_{parcel} at 250 mb = _____

2. $T = 15^{\circ}C$, $T_d = -12^{\circ}C$ at 930 mb

 $w = \underline{\hspace{1cm}} w_s = \underline{\hspace{1cm}} RH = \underline{\hspace{1cm}} LCL = \underline{\hspace{1cm}} T_w = \underline{\hspace{1cm}}$

 $\theta =$ ______ $\theta_e =$ _____ $T_e =$ _____

 T_{parcel} at 500 mb =______ at 800 mb =_____

3. $T = -7^{\circ}C$, $T_d = -15^{\circ}C$ at 810 mb

 $w = \underline{\hspace{1cm}} w_s = \underline{\hspace{1cm}} RH = \underline{\hspace{1cm}} LCL = \underline{\hspace{1cm}} T_w = \underline{\hspace{1cm}}$

 $\theta =$ _____ $\theta_{\rm e} =$ _____ $T_{\rm e} =$ _____

 $Dewpoint_{parcel} \ at \ 750 \ mb = \underline{\hspace{1cm}} T_{parcel} \ at \ 750 \ mb = \underline{\hspace{1cm}}$