{Probelm 3E}

```
$UNITS ENGLISH
P=1*convert(atm,psi)
temp_dry=80[F]
humidity_relative=0.60

humidity_absolute=humrat(AirH2O,P=P,T=temp_dry,R=humidity_relative) {Absolute Humidity: humidity_absolute = 0.01316 }
enthalpy=enthalpy(AirH2O,P=P,T=temp_dry,R=humidity_relative) {Enthalpy: enthalpy = 33.61 BTU/lb_m}
volume=volume(AirH2O,P=P,T=temp_dry,R=humidity_relative) {Specific Volume: volume = 13.89 ft^3/lm_m}
temp_wetBulb=wetbulb(AirH2O,P=P,T=temp_dry,R=humidity_relative) {Wetbulb Temperature: temp_wetBulb = 69.65F}
temp_dewPoint=dewpoint(AirH2O,P=P,T=temp_dry,R=humidity_relative) {Dewpoint Temperature: temp_dewPoint = 64.88 F}
```

SOLUTION

Unit Settings: Eng F psia mass deg

enthalpy = 33.61 [Btu/lb$_m$]	$humidity_{absolute}$ = 0.01316
$humidity_{relative}$ = 0.6	P = 14.7 [psi]
$temp_{dewPoint}$ = 64.88 [F]	$temp_{dry}$ = 80 [F]
$temp_{wetBulb}$ = 69.65 [F]	volume = 13.89 [ft^3/lb$_m$]

No unit problems were detected.

EES suggested units (shown in purple) for enthalpy temp_dewPoint temp_wetBulb volume .