{Question 4.007}

```
P_1=10[bar]
T_1=20[C]
P_2=3.0[bar]

h_1=enthalpy(Ammonia, P=P_1*convert(bar, kPa), T=T_1)
h_2=h_1

T_2=temperature(Ammonia, P=P_2*convert(bar, kPa), h=h_2) {Temperature: T_2 = -9.231C}
x_2=quality(Ammonia,P=P_2*convert(bar, kPa), h=h_2) {Quality: x_2 = 10.54 %}
```

SOLUTION

Unit Settings: SI C kPa kJ mass deg

h_1 = 293.9 [kJ/kg]	h_2 = 293.9 [kJ/kg]	P_1 = 10 [bar]
P_2 = 3 [bar]	T_1 = 20 [C]	T_2 = -9.231 [C]
x_2 = 0.1054		

No unit problems were detected.

EES suggested units (shown in purple) for h_2 .