10/26 Attendance, J. Riezman

a) $\Delta S = \int \frac{dq_r}{T} = \int \frac{nC_p\,dT}{T} = nC_p \ln \frac{273.15+15.3}{273.15}$

$= 6.23\ J\,K^{-1}$

b) 3 paths → melt, heat, boil

b x) $\Delta S = \frac{\Delta H_v}{T} = \frac{40650(1)}{273.15} = 106.93\ldots$

h) $nC_p \ln\left(\frac{373.15}{273.15}\right) = 75.31\ln\frac{\sim}{\sim} = 23.4905\ldots$

m) $\Delta S = \frac{\Delta H_f}{T} = 22.00256\ldots$

$\Delta S_{tot} = 154.4\ J/K$