SUBJECT

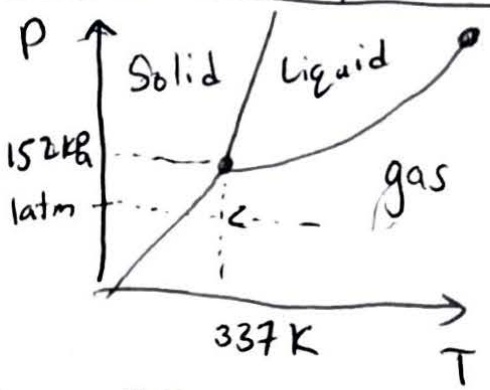
Reading 1/28

NAME

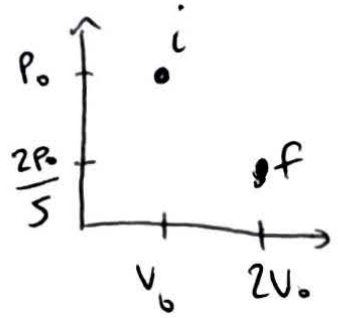
DATE | REVISION DATE

① gas → solid ("deposition")

The triple point is above atmospheric pressure so there is no liquid phase @ 1 atm



② (a)



(b) ① $P_0V_0 = nRT_0$

② $P_fV_f = nRT_f$

$\Rightarrow T_f = \left(\frac{P_fV_f}{P_0V_0}\right)T_0$

$= [(0.40)(2)](340\,K)$

$= 272\,K = -1°C$

(c) Irreversible processes can't be represented on a pV diagram (no path i → f exists)

See "Quasi-Static Processes" on pg. 503

③ (a) horizontal line ... isobaric process [const. P]

(b) vertical line ... isochoric process [const. V]

(c) hyperbola ... isothermal process [const. T]