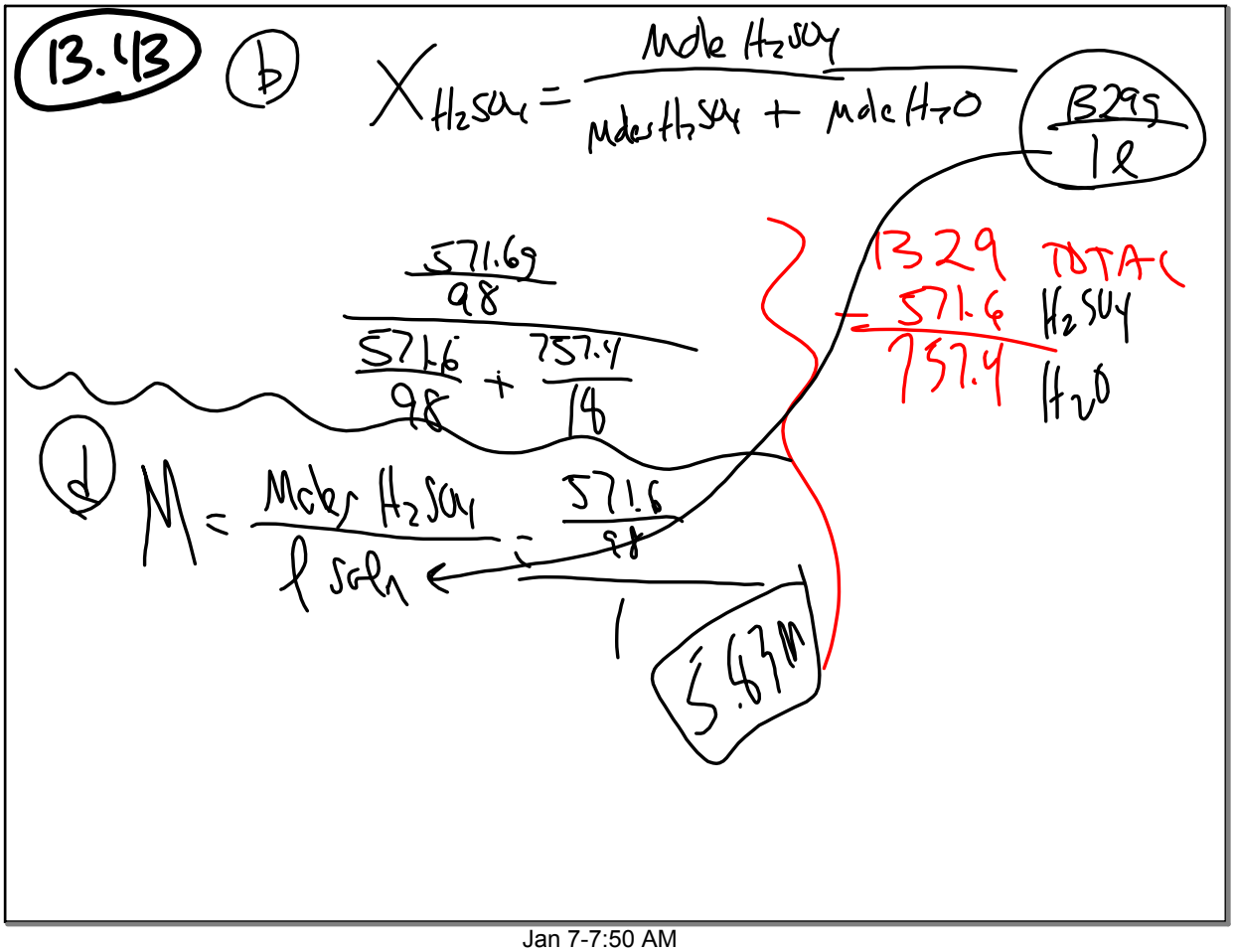
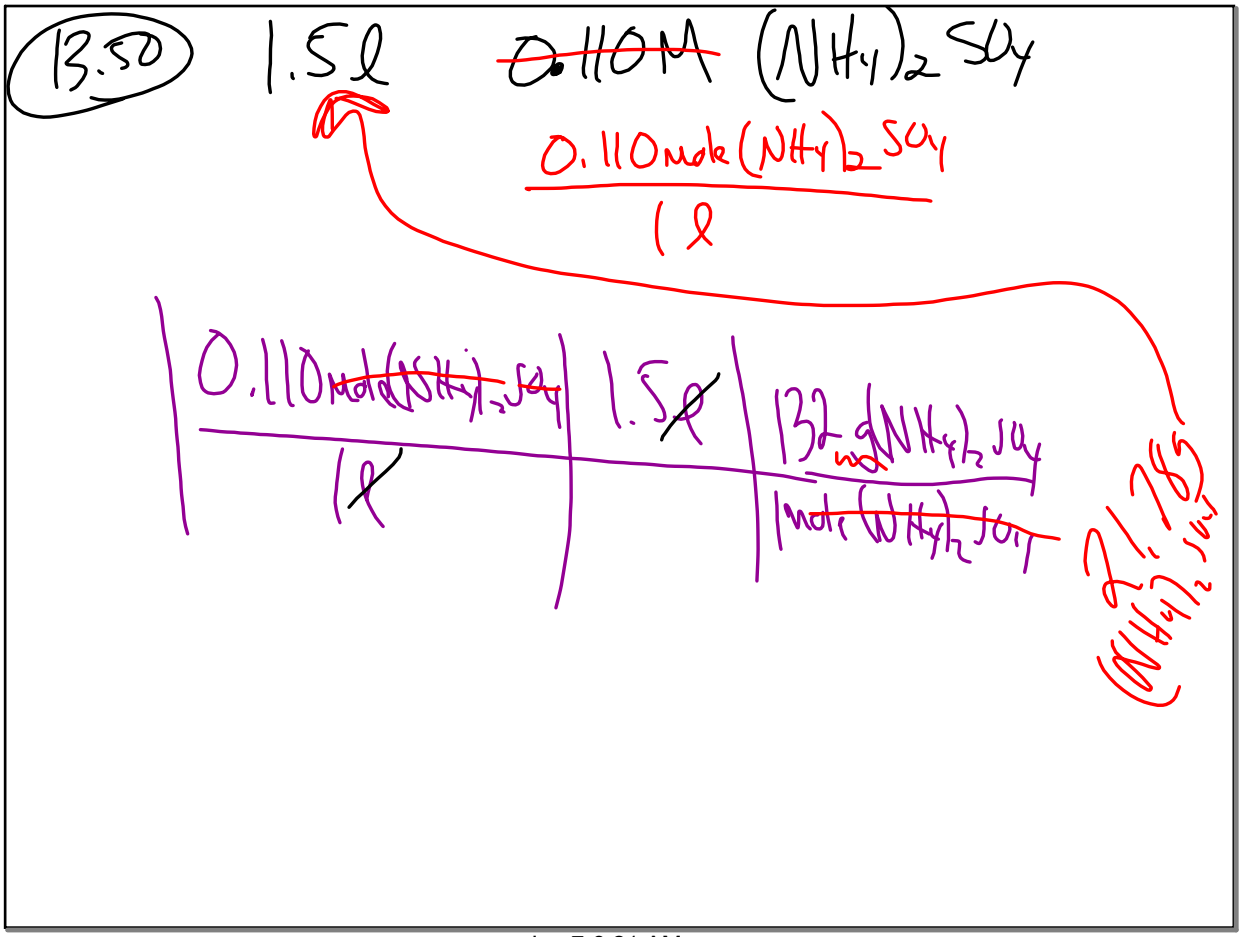
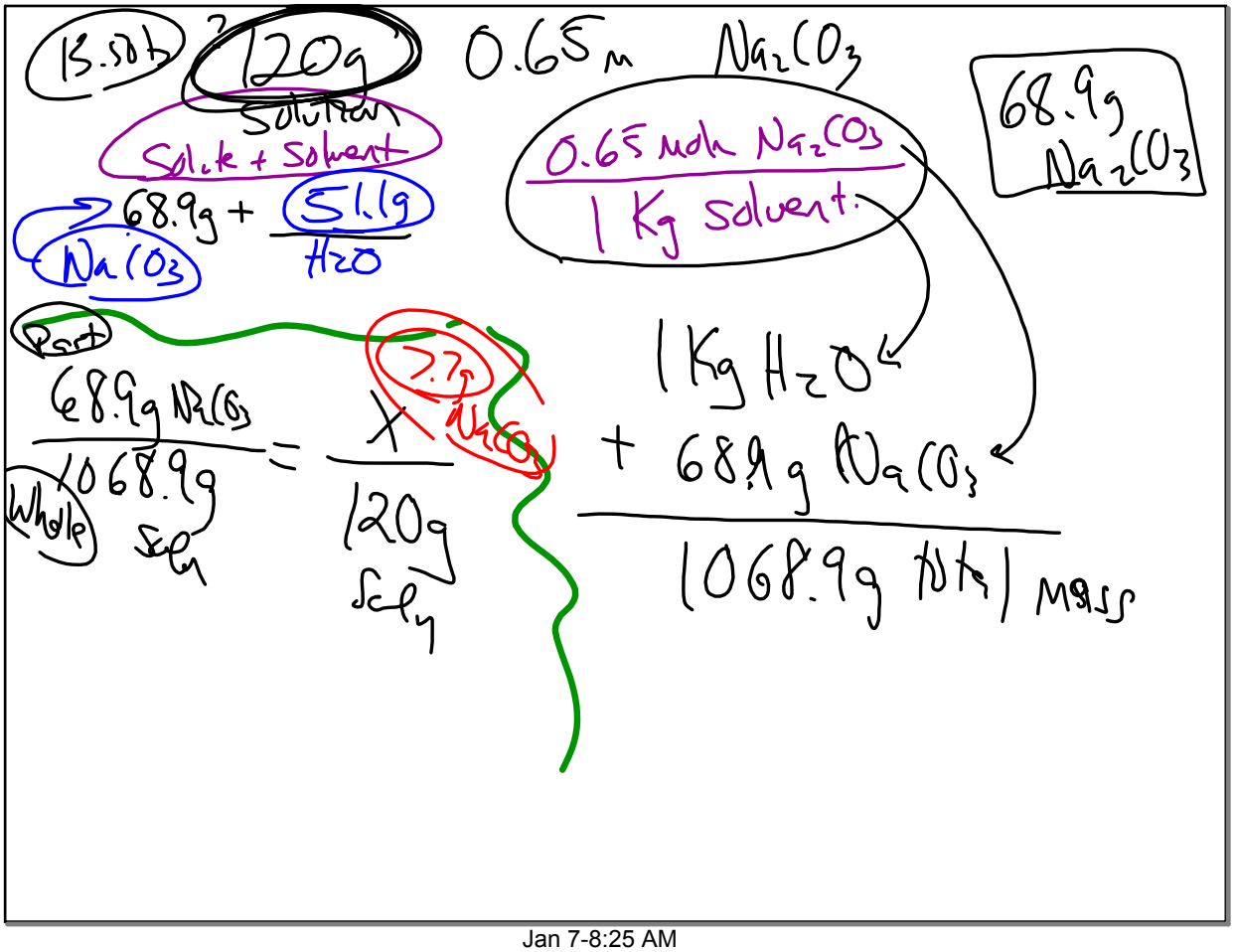


Jan 7-7:50 AM



Jan 7-8:21 AM



Jan 7-8:25 AM

$$\Delta T = (K * m)i$$

hot gets hotter!

Normal BP + ΔT = new BP

Normal FP − ΔT = new FP

cold gets colder

Jan 7-8:35 AM

Add 25g NaCl to 1l soln new BP = ?

$\Delta BP = 100°C$

$\Delta T = (K * M)\ell$

$K_b = 0.51\ M/°C$

$K_f = 1.86\ M/°C$

$\Delta T = \left(0.51 * \frac{\frac{25}{58}}{1kg}\right) 2$

$\frac{1g}{1ml}\ \frac{1000g}{1000ml} = \frac{1kg}{1l}$

$\Delta T = 0.44°C$

New BP = 100.44°C

Jan 7-8:37 AM

Add 25g NaCl to 1l H_2O ⇒ 1000ml 1000g

ΔBP & we ΔVP Vapor Pressure.

salt water

$VP_{soln} = X_{solvent} P_{water}$ Pure

Raoult's Law

$X_{solvent} = \frac{\text{Mole solvent}}{\text{Mole solvent + Mole solute}}$

VP_{H_2O} Pure ?

Text

$\frac{\frac{1000}{18}}{\frac{1000}{18} + \frac{25}{58}} = X_{H_2O}$

Jan 7-8:41 AM

PS 13 #1–15

Skip 3, 9, 11

Jan 7-8:47 AM