

NAME: \_\_\_\_\_

Quiz 18

1. If a beer starts at an ethanol concentration of 0.5 M and you prepare a 1:200 dilution of the beer with water, what is the concentration of ethanol in the dilution?

Tube	Buffer (without semicarbazide)	Buffer (with 75 mM semicarbazide)	16 mM NAD <sup>+</sup>	1200 units/mL ADH	EtOH test solution	Unknown solution	dH <sub>2</sub> O
1	2,625 uL	-	150 uL	75 uL	-	-	150 uL
2		2,625 uL	150 uL	75 uL	-	-	150 uL
3	2,625 uL	-	150 uL	75 uL	150 uL	-	-
4	-	2,625 uL	150 uL	75 uL	150 uL	-	-
5	2,625 uL	-	150 uL	75 uL	-	150 uL	-
6	-	2,625 uL	150 uL	75 uL	-	150 uL	-

2. Assume that the “unknown solution” of ethanol is the 1:200 dilution from question #1 and that the “EtOH test solution” is at 3 mM. Rank the expected absorbance at 340 nm from highest absorbance to lowest absorbance for tubes 3 through 6.

Highest Absorbance--

--Lowest Absorbance