

### Equilibrium Constant of a Hydrogen Bonded Complex

Name \_\_\_\_\_

$[A^\circ] = [\text{chloroform}^\circ] =$  \_\_\_\_\_  $\delta_A =$  \_\_\_\_\_ ppm

density (acetone) \_\_\_\_\_

$V_{\text{acetone}}$ (mL)	$[B^\circ]$ (M)	$\delta_{\text{avg}}$ (ppm)	$\Delta\delta_{\text{obs}}$ (ppm)

choose one:  all chemical shifts are relative to cyclohexane

all chemical shifts are relative to TMS

x	y

trial guess $\Delta\delta_{CA}$ (ppm)	$[B^\circ]$ (M)	K for trial guess

fit coefficients: a \_\_\_\_\_  $\pm$  \_\_\_\_\_

b \_\_\_\_\_  $\pm$  \_\_\_\_\_

fit parameter correlation coefficient between a and b \_\_\_\_\_

$\Delta\delta_{CA} =$  \_\_\_\_\_  $\pm$  \_\_\_\_\_ ppm

$K_{\text{eq}} =$  \_\_\_\_\_  $\pm$  \_\_\_\_\_

$\Delta_r G^\circ =$  \_\_\_\_\_  $\pm$  \_\_\_\_\_ units \_\_\_\_\_

Attach a plot of your curve fit