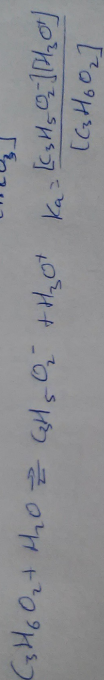
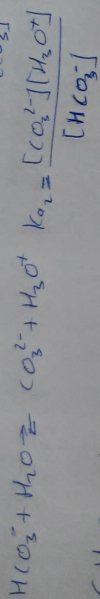
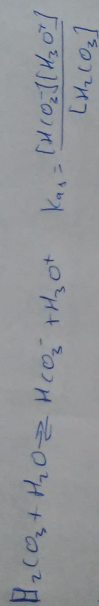


$$K = \frac{[H_2CO_3][C_3H_5O_2^-]}{[C_3H_6O_2][HCO_3^-]}$$



$$\rightarrow K = \frac{[H_2CO_3][C_3H_5O_2^-][H_3O^+]}{[C_3H_6O_2][HCO_3^-][H_3O^+]}$$

$$= \frac{K_{a1} \cdot 4.4 \cdot 10^{-4}}{K_{a2} \cdot 4.5 \cdot 10^{-5}} = \frac{33.33}{1}$$