2. (1 mark) Describe the importance of the \2k" term in Akaike's Information Criterion (AIC). What does it achieve? What would happen if we were to not include this term in the criterion?
(This answer only needs to be about 2 sentences long.)

➔ K represents the number of estimated parameters in the model. If the K is not included, then there will be no penalty for many number of parameters, so it will overfit.