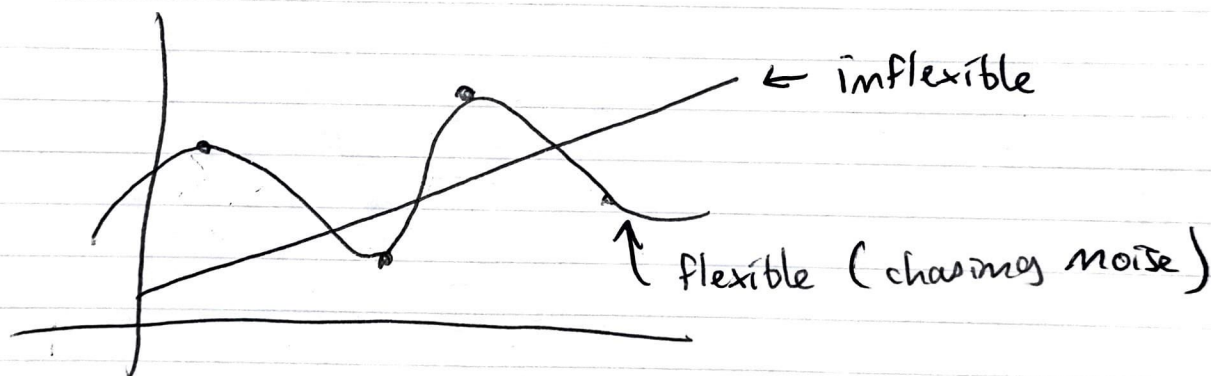# Quiz Problem 4

1. In this case there is enough data where if there is a statistical relationship it is clear, hence the Flexible model will perform better since it is able to model a higher number of types of relationships like x^2 etc - - - -.

2. In this case, the flexible model will perform worse since it will define relationships that have no statistical backing (in other words - chasing the noise)

← inflexible

↑ flexible (chasing noise)

3. Since the Flexible model is "curvier" it is able to better capture curvy or non-linear relationships

4. IF variance is very high the Flexible model will end up chasing the noise.