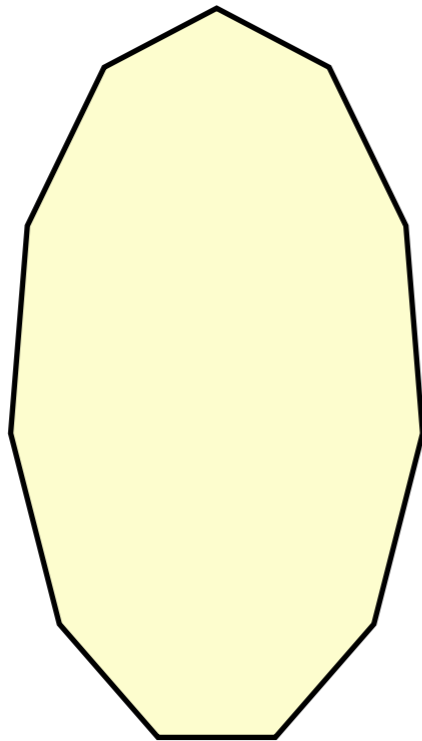


BUDGETED VACCINATION NOT SUBMODULAR

(FOR AGGRESSIVE DISEASES)

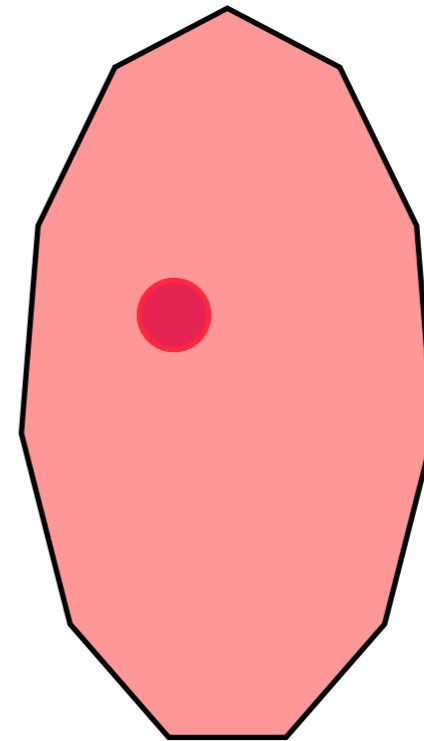


$$U_M(\emptyset) = 0$$

$$U_M(\{a\}) = 0$$

$$U_M(\{b\}) = 0$$

$$U_M(\{a,b\}) \sim n/2$$



$$U_M(\{b\}) - U_M(\emptyset) \not\approx U_M(\{a\} \cup \{b\}) - U_M(\{a\})$$