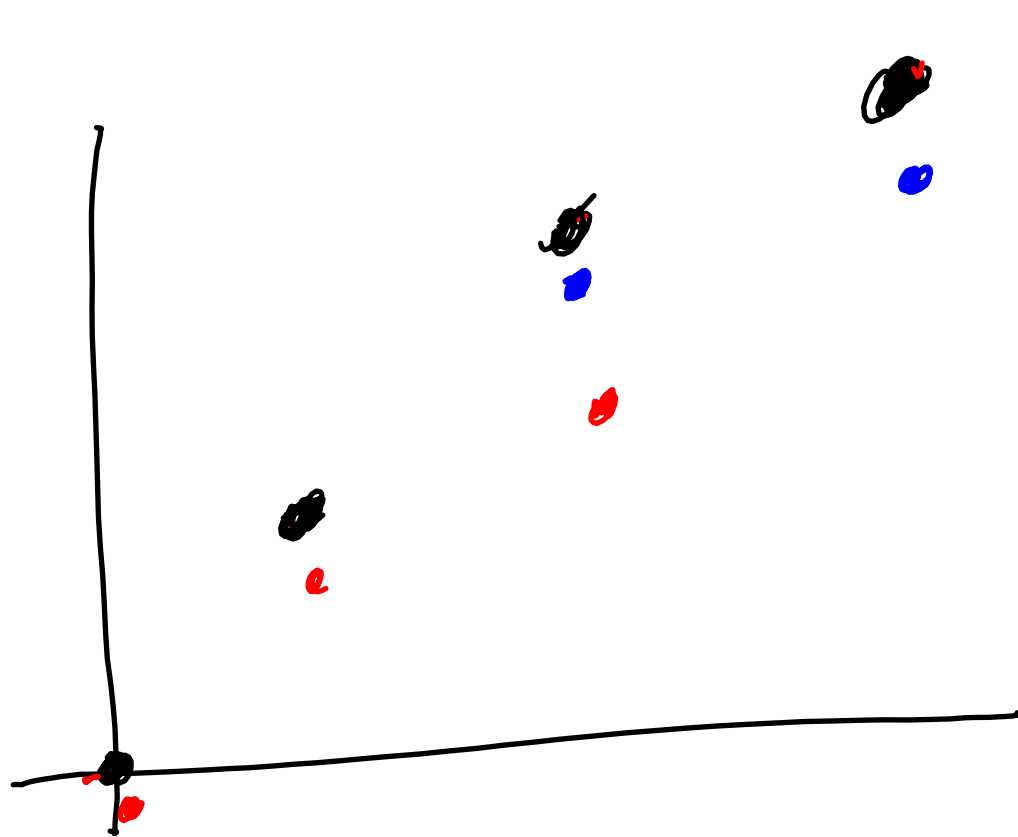


$$V = \frac{dX}{dt}$$

$$V_i \approx \frac{X[i+1] - X[i]}{dt}$$

$$\left(\begin{array}{c} (X[1] - X[0])/dt \\ (X[2] - X[1])/dt \\ \vdots \\ (X[i] - X[i-1])/dt \end{array} \right) \rightarrow \frac{X[1:] - X[:-1]}{dt}$$



$$V \approx \frac{X[2:] - X[: -2]}{2 dt}$$