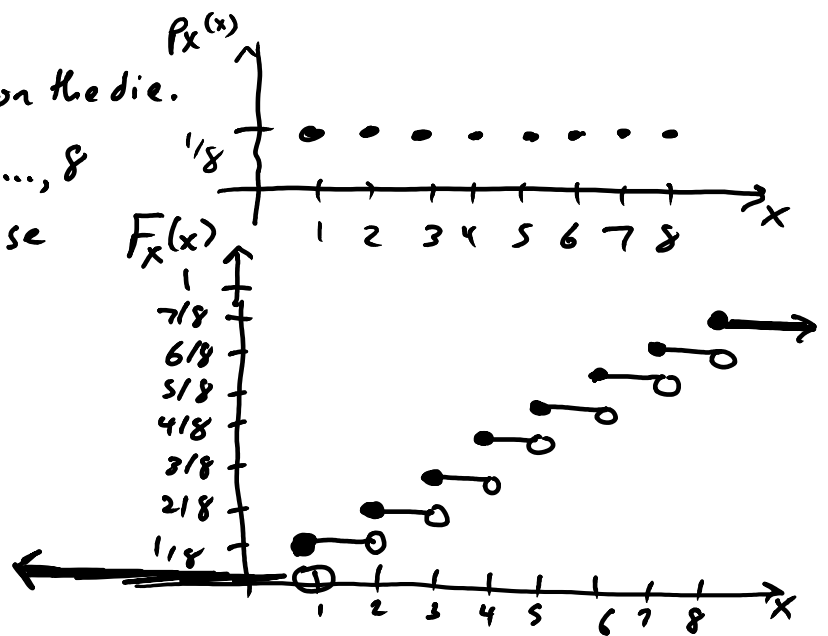


Roll an 8-sided die.

Let X be the value appearing on the die.

$$P_X(x) = P(X=x) = \begin{cases} \frac{1}{8} & x=1, 2, \dots, 8 \\ 0 & \text{otherwise} \end{cases}$$



In general, for all discrete random variables X , the CDF looks like a staircase.

The sizes of the stairsteps are the analogous mass values.