CONTINUOUS RANDOM VARIABLES

pdf: $f(x)$ such that $P(a \leq X \leq b) = \int_a^b f(x)\,dx$

- analogous to the pmf
- note $P(X = a) = \int_a^a f(x)\,dx = 0$

cdf: $F(x)$ such that $P(X \leq b) = F(b) = \int_{-\infty}^{b} f(x)\,dx$

- note: $F'(x) = f(x)$