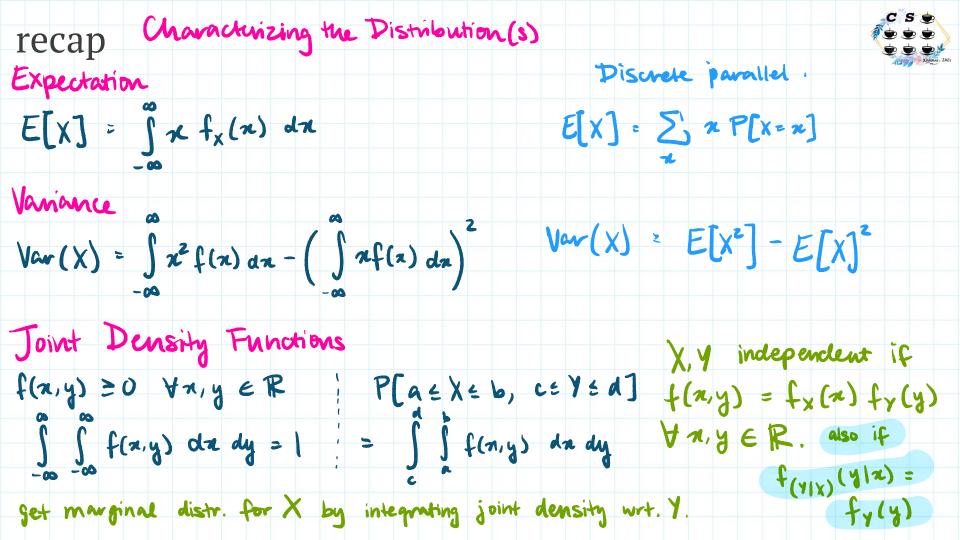
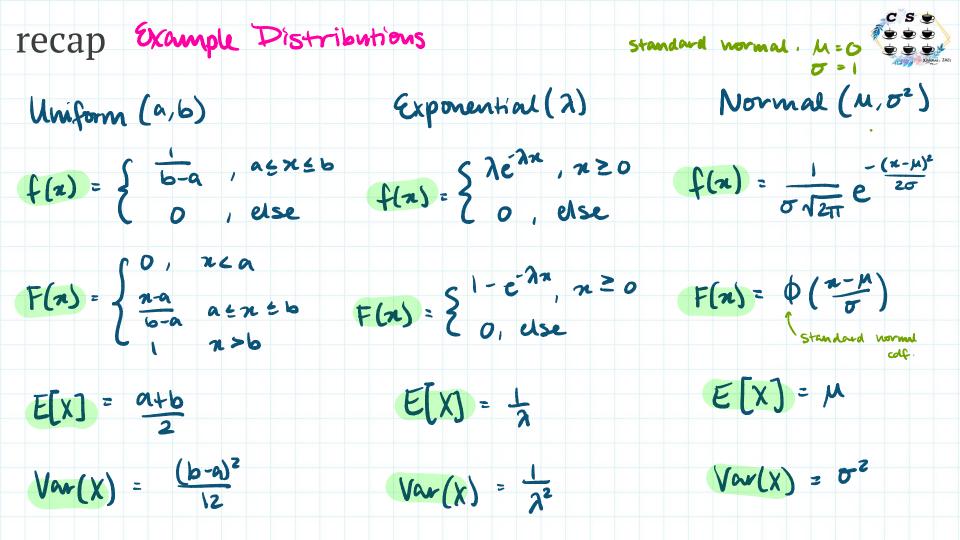
recap Continuous Probability $P[X=n] = 0$, consider $P(n \le X \le 2)$	x + dr) instead over an interval.
Probability Density Function $f_X(x)$ $f_X(x) \ge 0$ $P[X=x] \ge 0$	relevant discrete comparison lot of properties are very similar
$\int_{-\infty}^{\infty} f_{x}(n) dx = 1 \qquad \sum_{x} P[x = n] = 1$	f _x (x) evaluated @ 1 Value isvit really meaningful
Cumulative Distribution Function $F_x(x)$ $F_x(x) = P[X \le n] = \int_{-\infty}^{\infty} f_x(x) dx$	because $P[X=x]=0$ but we can integrate the pdf to ach the relative
pdf is the derivative	pdf to get the relative likelihood of X falling in some vange.
of the CDF.	





Disclaimer: { did not come C S 👳 up with this, just learned Steps For Solving Phoblems Involving 2 RVs this technique when (took 🖉 🛎 🛎 recap * ک ک ک the class 🙂 aishani. 202 general tip consider how you would do it if it were a discrete problem, then think about what changes to make (ie sums > integrals, P[X=n] > fx(n) dn, etc) () plot your RVs on a 2D plane and shade the feasible region (3) find the bounds of the feasible region, eg - our domain of integration usually won't be too crazy, but do some practice on this 3 find/determine pdfs of your kvs - sometimes CDF is casier to find, so get CDF and derive. (1) if both are uniform, find area of region (like just zb h kinda smff) else, integrate over the joint density function.