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Note: we will assume this sum converges, i.e.: $\sum_{x \in S_X} x p_X(x) < \infty$ sample: Mean of a Bernoulli RV $p_X(k) = \{i-p \text{ if } k=0\}$	xpected Vi	value of a RV			
cample: Mean of a Bernoulli RV px(k)= (1-p if k=0	The	expected value or "mean" is $m_X = E[X] = x \in S_X$	$\sum_{\mathbf{x}} \mathbf{x}_{\mathbf{k}} \mathbf{p}_{\mathbf{x}}(\mathbf{x}_{\mathbf{k}}) $	k is the countably value, i.e	: Onl:coins Ind:cli
cample: Mean of a Bernoulli RV px(k)= (1-p if k=0	Nato	we will become this sum componer is . 5 late	1 400		
			A1 >W		
E[X]=1.p+0(1-p)=p	cample: Me	can of a Bernoulli RV Px(k)= (1-p if k=0			
		E[X]=1.0+0(1-D) = D			

E[X] = 1. \$ +2. \$ + 2. \$ + ... + 6. \$ = 3.5

Example: Rolling a dice

Not	es: • El	[X]	is no	t neces	ssarily t	he most	· likely	value o	ŧΧ					
	• It	is n	ot gu	arantee	ed to b	e equa	l to a	n empin	rical a	verage				