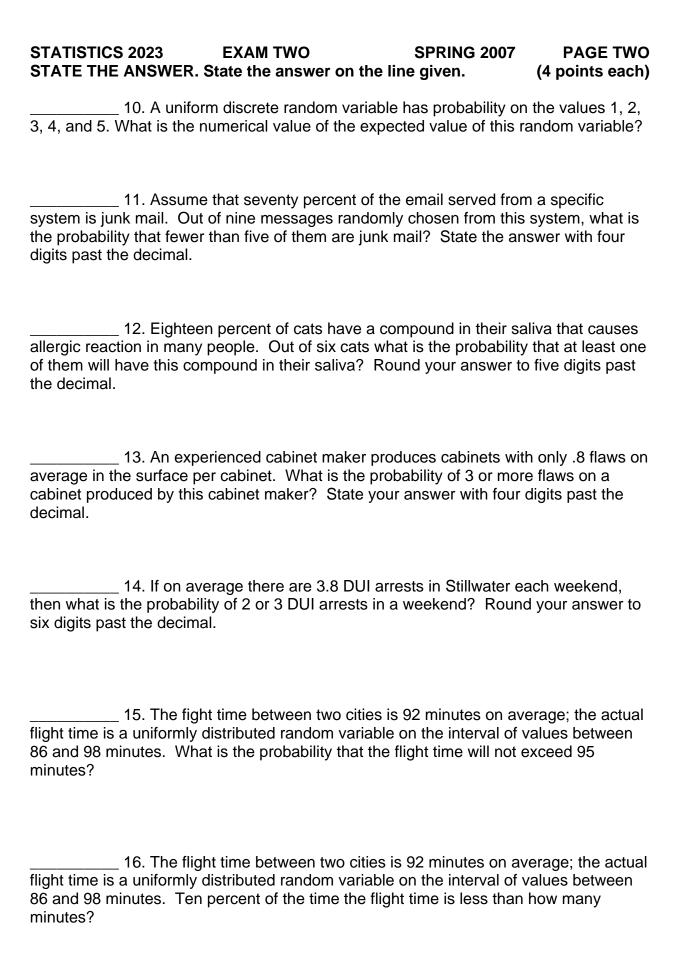
STATISTICS 2023	NAME, IN INK				
EXAM TWO	SIGNATURE, IN INK				
SPRING 2007	CWID, IN INK				
Retain this exam for gra	de verification once it is grade	ed and returned to you.			
TRUE OR FALSE. Answ	er with a capital T or F.	(4 points each)			
1. The number of are both discrete random	people in attendance and the arvariables.	mount of time a meeting takes			
	andom variable is a variable that probability at all on any single v	• •			
	ss functions use area under curv value of a discrete random varia	•			
4. The mean or exthe variance of the discret	xpected value of a discrete rand re random variable.	om variable is always equal to			
5. If a variable had zero and the standard dev	s a normal distribution then the i viation is always one.	mean of the variable is always			
6. The Binomial d	listribution is always right skewe	d when the p value is above .7			
STANDARD NORMAL D provided.	ISTRIBUTION QUESTIONS. S	tate the answer on the line (4 points each)			
7. Find z _o if	$P(Z < z_0) = 0.0885.$				
8. Find the	P(0.67 < Z < 2.56).				
9. What is t	he P(Z > - 1.48)?				



The habitat of the western half of the night, which has e normally distribute	B EXAM TWO WER. State the answe Eastern Screech-Owl co panhandle. This is a co xcellent eyesight. The vide random variable with se this information to an	r on the line gi overs the entire common owl, ac wingspan of the a mean of 19 in	state of Oklal tive at dusk an Eastern Scre aches and a st	nd during the ech-Owl is a
	nirty-three percent of Ea State your answer wit		• •	
are between what	18. Ninety five p two values? State two			h-Owl wingspans the decimals.
19. V between 19.133 a	Vhat is the probability th nd 19.868 inches?	at the Eastern S	Screech-Owl v	wingspan is
20. V than 18.475 inches	Vhat is the probability th s?	at the Eastern S	Screech-Owl v	wingspan is more
21. C many inches?	Only 1.5% of the wingspa	ans of the Easte	ern Screech-C	Owl exceed how

STATISTICS 2023 EXAM TWO SPRING 2007 (4 points each) Assume 100 observations were randomly drawn from a population of investment returns with a mean of 1,650 dollars and a standard deviation of 50 dollars. Use this information to answer the remaining questions. _______ 22. What is the numerical value of the mean of all possible sample means that would result from the above situation? ______ 23. What is the numerical value of the standard deviation of all possible sample means that would result from the above situation?

24. Only 0.25% (or 0.0025) of the sample means that result from the

25. What is the probability that the sample mean that results from the

above sampling situation will be less than what value?

above situation will be between 1,647 and 1,657 dollars?