

STATDISK CH 4 Answer sheet

Name _____

(Total pts: 42) Note: Because a random number generator is used, all student answers will be different.

Can be started after completion of probability fundamentals (4.2); 6 pts for 4-7, 4-8, 4-20, 4-21.

Any time you are asked to indicate a probability which has been simulated from STATDISK, give the **FRACTION FIRST, then the decimal value.** (Ex: $121/800 = 0.151$; give **at least 3 significant digits**)

4-1 (See p. 45, coins generator)

a. count= _____

b. p= _____

Ques #1 _____ Ques #2 _____

4-2 a. _____

b. _____

Ques. _____

4-7 and 4-8 (see p. 45, coins generator): A large number of trials should be run. Use $n=1000$. The number of trials will be your denominator. Count the number of trials that have the characteristic desired. For 4-7, count how many 55's, 56's, 57's, etc you get in 100 "births" (100 coins)

4-7 _____

Procedure: see above _____

Effectiveness of treatment?

4-8 _____

Procedure: _____

Effectiveness of treatment?

4-13 (uniform generator; no decimals)

4-14 _____

Y/N

4-15 _____

P= _____

4-18 (normal generator; one decimal)

4-20 (Normal generator, no decimals)

a. _____ b. _____ c. _____

d. (repeat part (c), not part (a))

e. _____

4-21 a. There is a typo in the question. It should read “Count the number of ONES that occurred....”.

P(1)= _____

b. _____

c. _____

d. _____

e. _____

f. _____

STATDISK CH 5 Answer sheet (Total pts: 32)

Can be started after completion of study of binomial distributions (5.3); 5pts for #8.

(Give **at least 3 significant digits**.)

5-4 a.

x	P(x) from STATDISK	P(x) from Table A-1
0		
1		
2		
3		
4		

b. _____

5-5 a.

x	P(x)
0	
1	
2	
3	
4	

5-6 a. _____ b. _____ c. _____

5-7 Use $P(\text{girl})=.4879$; ignore the $p(\text{boy})$.

a. _____ b. _____ c. _____

Compare results to 5-6 _____

5-8 a. _____

b. _____

c. _____

d. _____

e. _____

5-9 _____

5-13 _____

5-18 a. $p(x \geq 9) =$ _____

b. $p(x \leq 7) =$ _____ Unusual? _____ Why? _____

5-19 $P(2 \text{ or fewer women}) = p(x \leq 2) =$ _____

Charge supported? _____

5-20 $p(9 \text{ girls}) = p(x \geq 9) =$ _____

Gender selection technique effective? _____

Why or why not? _____