

Problem Sets Prior to Test 1

Only turn in problems that are **not** bracketed. Bracketed problems are additional problems you can look at. Round brackets indicate problems that may help you with problems that are assigned; square brackets are additional problems on material that you should know, but you are not required to write up solutions; curly brackets are truly optional and may contain extra nuggets that you will not be required to know but may be interested in.

Additional assignments will be filled in over time.

PS	Due	Source	Problems
1	Tues 9/9	handout FASt App A	Fill out personal information form. {Install R on your computer.} (Visit course web page at http://www.calvin.edu/~rpruim/courses/m343/F08 .) (1,3) union/intersection 2 union 4 complement 9 sum/products 16 simplify sums
2	Fri 9/12	FASt App A FASt App B FASt 1	(6) indicator 7–8 indicator 10 geometric sums 17 evaluate sums 1–2 R intro 1 symmetric distributions (2) mean vs median 6 SS (7–8) variance examples 9 max award [11–12] baseball statistics 13 Old Faithful (14) pulse 15 births
3	Mon 9/15	handout	Read the brief history of statistics and answer the following questions: 1 What role do the authors claim that Christianity played in the development of the discipline of statistics? 2 Summarize (briefly) the origins of modern statistics (people, places, times, ideas) [Can be answered in outline/bullet form, timeline, etc.]
4	Thurs 9/18	FASt 1 FASt 2	[3] total deviation [4–5] mean absolute deviation 10 microdrills, transformation [16] little survey 1–2 terminology {3} R function 6 two pair 12 Bonferroni's Inequality 14a easy probability
5	Mon 9/22	FASt 2	[4] bijections [7] full house 8 three of kind 10 birthday problem 14bc assembly line 16 symmetry of cond prob 17a independent 18 independent? 19 disease 21 Yahtzee! [22] same color cards 23 false positives 24 rearrangements 25 acceptance sampling 26 run of three [27] Mastermind [28] poker 30 binomial identities
6	Thurs 9/25	FASt 2	9 number of suits 20 DMD 29 gentleman tasting wine 31a socks 32 coins 33 deMere 34 socks 38 free throws 39 free throws 40 multiple choice 41 sports Notes: In problem 2.38, “10 in a row” should be “first 10 shots”. In problem 2.39d, ‘Frank’ should be ‘Freddie’.
7	Mon 9/29	FASt 2	42 memorlessness 43 spinner [44] Gus 45 Mendel 46 beetles [51] give reasons 59 Wierd Willy 61 betting scheme
8A	Thurs 9/27	FASt 2	Redo up to five problems from PS 5 and PS 6.
8	Fri 9/28	FASt 2	47–48 testing coins [49] power jaggies [52] give reasons 53 variance of linear transformation [54] socks revisited [55] neg binomial 56 uniform [57] search 58 roulette [60] comparison [64] longer sums 70 fair game with unfair coin 72–73 buy a ticket? 78 kings and queens 79 kings and hearts 80 urn

notation	meaning
unbracketed	assigned problem – turn these in for grading
()	helper/warm-up problem
[]	additional problems (you are responsible for content, but don't turn them in)
{}	covers optional material