

Problem Sets Between Before 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	Chapter	Problems
0	1/31	– –	Buy the textbook and bring it to class. Fill out the information sheet and bring it to class.
1	2/6	1	(1) books as units, [2–3] Challenger, 6 do doctors listen?, 13 internet use, 14 smoking, 15 smoking,
2	2/10	1	(17) attitude in class, 18 second hand smoke, (22) school uniforms, (23) lights and myopia, 24 mirrors and exercise, 25 mirrors and exercise, 29 flights on time, 31–32 random assignments,
3	2/14	1	36 random babies, 37–38 roulette ¹
4	2/17	1	33 random assignments, 35 random assignments, 39 ELISA test for AIDS, 43 gender discrimination, [44] gender discrimination, 47 tamoxifen, [50] caps in class, [51] attending a play, [52] more info
5	2/21	2	4 tennis, [5] tennis, 9 memorization, 16 art prices, 23 linear transformations, [26] IQ, (27) children and siblings, 28 class size
6	2/24	2	38 memorization again, 39 Bumbus data, 41 restaurant music Note: You do not need to turn in your R code for doing the simulations. You should be able to use our simulate command with few if any changes.

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

¹For the roulette problems you will need to use a computer to do some simulations. The text provides you with Minitab instructions. Here is some R output showing both the commands you could use to do this yourself and the output (so you don't necessarily have to go and do it, but you are welcome to do so and use your own random results).

```
> payoffs <- c(rep(-1,36),rep(35,2)); payoffs
[1] -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1
[16] -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1
[31] -1 -1 -1 -1 -1 -1 35 35

> table(replicate(1000,sample(payoffs,1)))

-1 35
954 46

> payoffs <- c(rep(-1,20),rep(1,18)); payoffs
[1] -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1
[16] -1 -1 -1 -1 -1 1 1 1 1 1 1 1 1 1 1 1
[31] 1 1 1 1 1 1 1 1

> table(replicate(1000,sample(payoffs,1)))

-1 1
556 444
```