

CHAPTER 1

Problem 1

A	32.5	30.9	33.4	31.7	31.3	33.1
B	29.6	30.4	32.1	31.6	32	31.1

$u = y - x$

mean x	32.15	var x	0.846
mean y	31.13	var y	0.799
mean u	-1.02	var u	1.6447
		stdev u	1.2825

P(u > 0)	0.214
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Problem 2

mean x	300
mean y	700
mean u	8050
var u	424.01
stdev u	20.59

$u = 3.5x + 10y$
 $var u = 3.5^2 \times 1.4^2 + 10^2 \times 2^2$

min u	$\mu - 3\sigma$	7988
max u	$\mu + 3\sigma$	8112

Problem 3

mean x	50	stdev x	4	var x	16
mean y	20	stdev y	3	var y	9
				var u	11
				stdev u	3.283

$u = y - x/3$

mean u	3.334
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P(u < 0)	0.155
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Problem 4

x	23.5	21.7	22.8	26.2	25	22	20.5	25
y	16.5	19	14.6	15.2	18	13.7	12.8	14.5
z	43	45.5	40.6	38.8	42.6	44.5	45.6	48

mean x	23.3375	var x	3.320
mean y	15.5375	var y	3.990
mean z	43.575	var z	7.647
mean u	90832.5	var u	22601669
stdev u	4754.12		
80000	0.0113		
90000	0.4305		

$u = 1200x + 1800y + 800z$

P(80000-90000)	0.4191
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