

TO FINISH BY THE END OF THE DAY OF APRIL 21:

Chapter 2.3: 27, 29, 41

Chapter 2.4: 7-12, 15, 24, 30, 31, 50

Chapter 2.5: 11, 13, 15, 17, 19, 22, 23, 35, 37

Extra Problems:

1. The SAT scores of high school seniors have a distribution that is approximately normal with mean 500 and standard deviation 100.

a) Choose one senior at random. What is the probability that his or her score is higher than 500? Higher than 600?

b) Now choose a random sample of 4 seniors. What is the probability that the average of their scores is higher than 500?

Higher than 600?

2. Juan makes a measurement in a chem lab and records the result in his lab report. The standard deviation of students' lab measurements is 10 mg. Juan repeats the measurement 3 times and records the average of his 3 measurements.

a) What is the standard deviation of Juan's average result? (That is, if Juan kept on making 3 measurements and averaging them, what would be the standard deviation of all the averages?)

b) How many times must Juan repeat the measurement to reduce the standard deviation of the average to 5?

The table of previous final problems is on the next page.

TABLE 1. Key final exam homework problems to review in recitation

Exam	Problem #	Chapter	Answers
F06	16	2.5	A
F06 Mkp	16	2.5	H
S06	16	2.5	E
F05	9	2.5	B
	13	2.5	F
F05 Mkp	9	2.5	D
F04	5	2.5	B
S04	15	2.5	A
F03	18	2.5	d
S03 Mkp	13	2.5	F
F02	17	2.5	B
	19	5.6	F
Sample 1	15	2.5	d
Sample 2	15	2.5	e
	19	2.5	f
Sample 3	14	2.5	b