REVIEW FOR STATS TEST

1) Fifty tickets are numbered 1 - 50 and are placed in a box. You pull out one ticket.

a) What's the probability that you'll randomly select a ticket with an even number or a multiple of 5?

b) What's the probability that you'll randomly select an odd number and a multiple of 2?

2) What is the probability of getting 2 face cards if 2 cards are drawn from a well-shuffled deck without replacement?

3) Find the median, the Q1 and Q3 of the set of data:

84, 79, 90, 73, 95, 88, 92, 81, 67

Then make a well constructed box and whiskers plot.

What is the Inner Quartile Range?

4) Find the number at the 20th and the 80th percentile of the set of data:

7, 16, 8, 5, 10, 9, 3, 4, 11, 1

Which number is the outlier?

5) The table shows the relationship between the field goals attempted and point scored by one basketball player over a 6-game period.

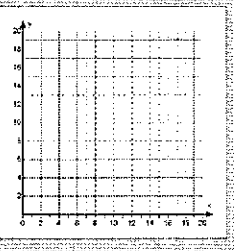
Field goals attempted (b)	8	6	10	9	7	10
Points scored (p)	12	9	14	14	11	15

1) Draw a scatterplot to show how the field goals attempted and points scored are related.

2) Find the line of best fit (by hand).

3) Using your line of best fit equation, predict the points scored if 20 field goals are attempted.

4) How many field goals were attempted if he scored 10 points?



6)

Assume that the data which reflects the "Heights of Women" is normally distributed.

Heights of Women	
Mean =	64.5 in.
Standard Deviation =	2.5 in.

Draw a normal distribution curve for this data. Include 3 standard deviations from the mean in each direction.

What percentage of women sould be 67 inches tall or taller?

7)

Students that took the SAT in 2012 had a mean score of 514 on the math section.

The standard deviation for this section was 114.

If a student scored a 340, what was his z-score?

8)

The table shows the number of endangered and threatened animal species in the United States as of November 30, 1996. Find (a) the probability that a listed animal is a reptile and (b) the probability that an endangered animal is a reptile.

Source: United States Fish and Wildlife Service

	Mammals	Birds	Reptiles	Amphibians	Other
[illegible]	59	75	14	9	198
[illegible]	8	15	21	1	69

9) A school administrator made the following observations about the weather and schools closing.

During the winter, there was heavy snow on 40% of the days.

On the days that there was heavy snow, schools closed 80% of the time.

On the days there was light snow, schools were open 70% of the time.

Create a tree diagram to find the probability that a day will start out with heavy snow and school will be open.

10)

Education and Salary of Employees	Under $20,000	$20,000 to $30,000	Over $30,000
Less than High School	68	36	2
High School	112	97	14
Some College	101	193	142
College Degree	13	177	245

P(employee has less than a high school education)

P(employee earns under $20,000)

P(employee earns over $30,000 and has less than a high school education)

P(employee earns over $30,000 | employee has only high school education)

P(employee has only a high school education or less | employee earns over $30, 000)

P(employee has attended at least some college | employee earns at least $20,000)

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6-16, 28-32,
42-48 (no clac),
55-59 (no calc),