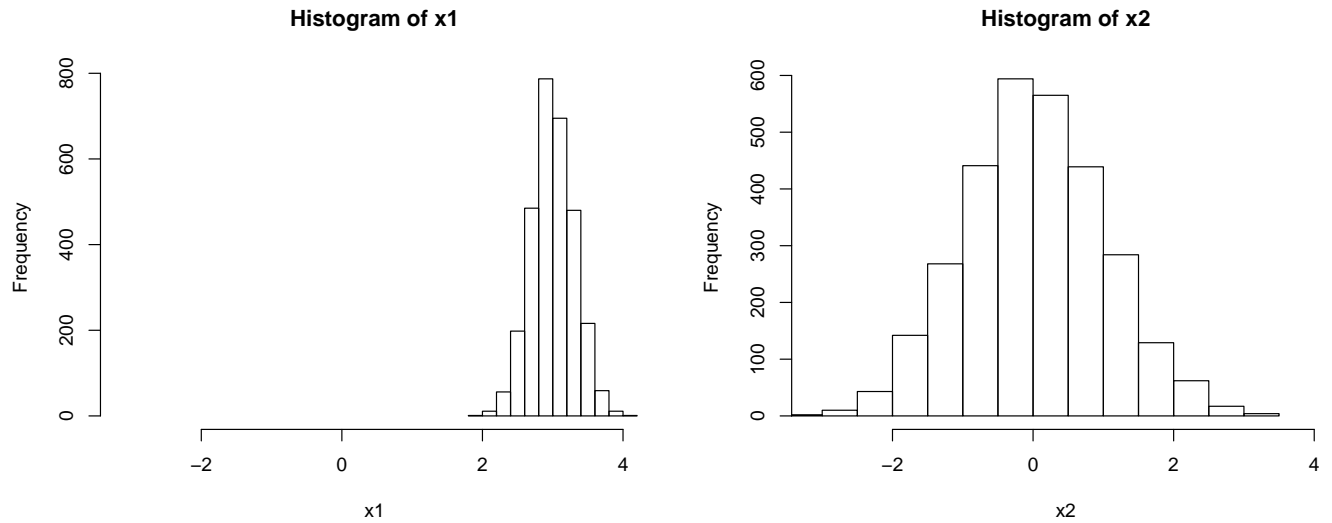# Statistics XP84 - Quiz 1

NAME: _____

You have 15 minutes.
Each part of each question is worth 2 points.
There are three questions.

I pledge my honor that I have not violated the Honor Code
during this examination.

SIGNATURE: _____

1 Question

Histogram of x1

Histogram of x2

Above are histograms of numbers labeled x_1 and numbers labeled x_2.
For (a)-(d), circle the correct answer.

(a) The average of the x_1 numbers is

(i) -2 (ii) 4 (iii) 0 (iv) 3

(b) The average of the x_2 numbers is

(i) -2 (ii) 4 (iii) 0 (iv) 3

(c) The standard deviation of the x_1 numbers is

(i) .3 (ii) .05 (iii) 16.4 (iv) .99

(d) The standard deviation of the x_2 numbers is

(i) .3 (ii) .05 (iii) 16.4 (iv) .99
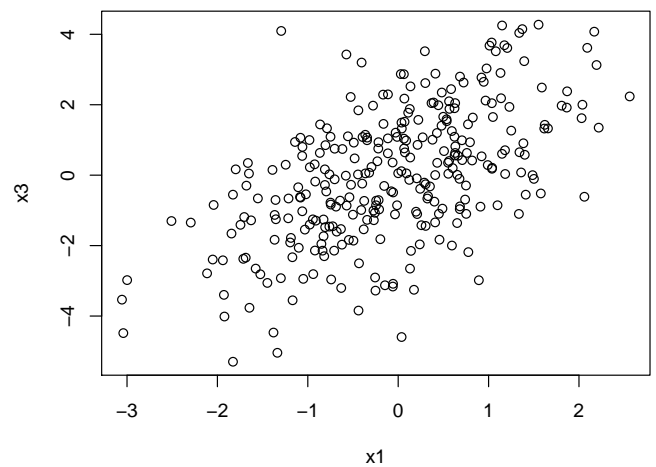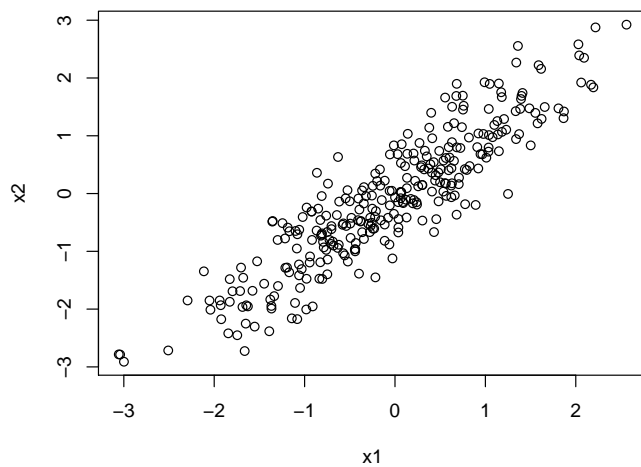
(e) What is the variance of the x_2 numbers?

(f) Give an interval which will contain about 95% of the x_2 numbers.

2   Question

Suppose $X \sim$ Bernoulli(.5).

(a) What is $E(X)$?

(b) What is $Var(X)$?

(c) What is σ_X ?

3   Question

For (a) and (b), circle the correct answer.

(a) The correlation in the left plot above is

(i) -.87 (ii) .01 (iii) .903 (iv) .57

(a) The correlation in the right plot above is

(i) -.87 (ii) .01 (iii) .903 (iv) .57