

# EDMS 646: Homework 2

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## Part 1: Correlation

- 1.
- 2.
- 3.

4. How to write Mathematics

L<sup>A</sup>T<sub>E</sub>X is great at typesetting mathematics. Let  $X_1, X_2, \dots, X_n$  be a sequence of independent and identically distributed random variables with  $E[X_i] = \mu$  and  $\text{Var}[X_i] = \sigma^2 < \infty$ , and let

$$S_n = \frac{X_1 + X_2 + \dots + X_n}{n} = \frac{1}{n} \sum_i^n X_i$$

denote their mean. Then as  $n$  approaches infinity, the random variables  $\sqrt{n}(S_n - \mu)$  converge in distribution to a normal  $\mathcal{N}(0, \sigma^2)$ .

- 5.

## Part 2: Simple Regression

- 1.
- 2.
3. blah blah

- (a) Like this,
- (b) and like this.
- (c)

- 4.
- 5.

6. mhmb

- (a)
- (b)
- (c)
- (d)
- (e)
- (f)
- (g)
- (h)
- (i)

7. geez

(a)

(b)

(c)

(d)

### **Part 3: ANOVA Table**

1.