Lecture #004 Pages (14 - 18)

Due Feb 8 at 5pm **Points** 10 **Questions** 5
Available Feb 1 at 12am - Feb 15 at 11:59pm **Time Limit** None
Allowed Attempts Unlimited

Take the Quiz Again

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	184 minutes	10 out of 10

Score for this attempt: **10** out of 10
Submitted Feb 4 at 11:15pm
This attempt took 184 minutes.

Question 1

2 / 2 pts

A simple linear regression model is used to relate a response variable Y and a predictor X.

The relation is Y= 4.2 + 5.6 X + ϵ where V(ϵ)=2.36.

Determine the variance of the response when X equals 5.3.

c003.p0280.q002

Correct!

2.36

orrect Answer

2.36 margin of error +/- 0.01

Question 2

2 / 2 pts

A simple linear regression model is used to relate a response variable Y and a predictor X.

The relation is Y= β_0 + β_1 X + ϵ where V(ϵ)=5.02.*

A sample was collected. The data, in the order it was collected, is as follows:

(4.5 , 2)	(3 , 2)	(0.4 , 2)	(3.4 , 2)	(2 , 2)

Determine SS(b_0*= 1.9 , b_1*= 1.2).

c003.p0290.q002

Correct!

61.6148

orrect Answer

61.6148 margin of error +/- 0.01

Question 3

2 / 2 pts

A simple linear regression model is used to relate a response variable Y and a predictor X.

The relation is Y= β_0 + β_1 X + ϵ where $V(\epsilon) = \sigma^2$.

A sample was collected. The data, in the order it was collected, is as follows:

(8 , 3)	(2 , 9)	(2 , 4)	(3.4 , 10)	(2 , 3)

Determine SS(b_0 , b_1).

c003.p0300.q001

Correct!

42.3848

orrect Answer 42.3848 margin of error +/- 0.1

Question 4

2 / 2 pts

A simple linear regression model is used to relate a response variable Y and a predictor X.

The relation is Y= β_0 + β_1 X + ϵ where V(ϵ)=5.93.*

A sample was collected. The data, in the order it was collected, is as follows:

(9.9 , 2)	(2 , 3)	(0.3 , 3)	(2.6 , 2)	(3 , 2)	... ...

Estimate the mean response when X=3.3, b_0=10, and b_1=6.

c003.p0310.q001

Correct! 29.8

orrect Answer 29.8 margin of error +/- 0.01

Question 5

2 / 2 pts

A simple linear regression model is used to relate a response variable Y and a predictor X.

The relation is Y= β_0 + β_1 X + ϵ where V(ϵ)=3.43.

A sample was collected. The data, in the order it was collected, is as follows:

(-14 , 21.1)	(-1, 34.4)	(0 , 22)	(1 , 28.9)	(14 , 27.8)

Estimate the mean response when X=0.

c003.p0320.q004

Correct!

26.84

orrect Answer

26.84 margin of error +/- 0.01

Quiz Score: **10** out of 10