

## Errata: Simple Linear Regression Video

In the prior video "Simple Linear Regression", there is an error in the calculation of theta0 at the timestamp 9:43 Estimating the Parameter slide. Please see the correction done here.

	ENGINE SIZE	CYLINDERS	FUEL CONSUMPTION_COMB	CO2 EMISSIONS
0	2.0	4	8.5	196
1	2.4	4	9.6	221
2	1.5	4	5.9	136
3	3.5	6	11.1	255
4	3.5	6	10.6	244
5	3.5	6	10.0	230
6	3.5	6	10.1	232
7	3.7	6	11.1	255
8	3.7	6	11.6	267

$X_1$  is indicated by a bracket on the left side of the table, spanning rows 4 through 8.  $y$  is indicated by a bracket on the right side of the table, spanning rows 4 through 8.

The accurate value of theta0 should be as follows:

**theta0=226.22 -39\*3.03** should be equal to **108.05**.

Additionally, at the timestamp 11:22, **Predictions with Linear Regression** slide the correct calculation is as follows:

	ENGINE SIZE	CYLINDERS	FUEL CONSUMPTION_COMB	CO2 EMISSIONS
0	2.0	4	8.5	196
1	2.4	4	9.6	221
2	1.5	4	5.9	136
3	3.5	6	11.1	255
4	3.5	6	10.6	244
5	3.5	6	10.0	230
6	3.5	6	10.1	232
7	3.7	6	11.1	255
8	3.7	6	11.6	267
9	2.4	4	9.2	?

**Co2Emission=108.05+39 EngineSize**

**Co2Emission=108.05+39 X 2.4**

**Co2Emission=201.65**

## Errata: Multiple Linear Regression Video

In the prior video "Multiple Linear Regression", an error occurred at the timestamp 10:00 in calculating Theta T, **Predicting with Multiple Linear Regression**. Please see correction below.

	ENGINE SIZE	CYLINDERS	FUEL CONSUMPTION_COMB	CO2 EMISSIONS
0	2.0	4	8.5	196
1	2.4	4	9.6	221
2	1.5	4	5.9	136
3	3.5	6	11.1	255
4	3.5	6	10.6	244
5	3.5	6	10.0	230
6	3.5	6	10.1	232
7	3.7	6	11.1	255
8	3.7	6	11.6	267
9	2.4	4	9.2	?

The accurate value of Theta T should be as follows:

**Theta T value: [62.43, 9.19, 8.70, 9.68]**

The corresponding regression equation is:

$$\bar{y} = 62.43 + 9.19 * x_1 + 8.70 * x_2 + 9.68 * x_3$$

Additionally, at the timestamp 10:20,

the correct predicted CO2 emissions (Co2Em) calculation is:

$$\text{Co2Em} = 62.43 + 9.19 * 2.4 + 8.70 * 4 + 9.68 * 9.2$$

$$\text{Co2Em} = 208.34$$