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## Getting Familiar with Regression Output - Quiz

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### Question 1

1/1 point (graded)

True or False:  $R^2$  is the estimated standard deviation of an estimator.☐ a. True☒ b. False ✓

### Explanation

False, the standard error is the estimated standard deviation of an estimator. Regression output will generally give you standard errors for your estimators. These values are a measure of the accuracy of predictions made with the corresponding estimators for the coefficients in the regression.

$R^2$  on the other hand is a basic measure of goodness of fit. Recall the formula for  $R^2$  is:  
 $1 - SSR/SST$

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### The Linear Model

due Nov 28, 2016 05:00 IST



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You have used 1 of 1 attempt

✓ Correct (1/1 point)

### Question 2

1/1 point (graded)

Suppose you get the following R output:

#### Coefficients:

	Estimate	Std. Error	t value	Pr(> t )	
(Intercept)	-1.030e+01	1.191e+00	-8.651	<2e-16	***
GenderM	-1.355e+01	1.587e+00	-8.536	<2e-16	***
Year	5.144e-03	5.920e-04	8.689	<2e-16	***
GenderM:Year	6.766e-03	7.891e-04	8.575	<2e-16	***

Which of the following values corresponds to  $\hat{\beta}_0$ ?

☐ a. -8.651

**The Multivariate Linear Model**

due Nov 28, 2016 05:00 IST

**Module 9: Homework**

due Nov 21, 2016 05:00 IST



- ▶ [Module 10: Practical Issues in Running Regressions, and Omitted Variable Bias](#)

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☐ b. 6.766e-03☒ c. -1.030e+01 ✓☐ d. 7.891e-04**Explanation**

The “Estimate” value for “(Intercept)” is the estimate of the y-intercept,  $\hat{\beta}_0$ .

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**Question 3**

1/1 point (graded)

Which of the following values corresponds to the standard error for  $\hat{\beta}_1$ , where  $\beta_1$  is the estimate for coefficient on the Year random variable?

☐ a. 1.191e+00☐ b. 8.689

☐ c.  $2e-16$ ☒ d.  $5.920e-4$  ✓

### Explanation

The regression output gives you a standard error for the estimator for each coefficient. Standard error is a measurement of the accuracy of predictions made with the estimator and is generally abbreviated to "Std. Err." in regression outputs.

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### Discussion

Topic: Module 9 / Getting Familiar with Regression Output - Quiz

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