

Below is an excerpt from linear regression output produced by a statistical program called S+:

Coefficients:

	Value	Std. Error	t value	Pr(> t)
(Intercept)	20.3279	4.2840	4.7451	0.0002
cig	-1.7088	0.9085	??	0.0783

Residual standard error: 5.634 on 16 degrees of freedom

Multiple R-Squared: 0.1811

F-statistic: 3.538 on 1 and 16 degrees of freedom, the p-value is ??

(1) Give the equation for the least-squares regression line of y on cig .

(2) What is the p-value for the test of $H_0 : \beta_0 = 0$ against a 2-sided alternative?

(3) What percent of the variation of the y values is accounted for by the regression of y on cig ?

(4) Give a 95% confidence interval for the slope β_1 .

(5) Fill in the question marks in the output above with the correct values.