

1. For the following tests, list the number of explanatory and response variables.

	Response	Explanatory
Analysis of winglength in two strains of mosquito, controlled for body size.	_____	_____
Correlation of serum cholesterol with calcium deposition	_____	_____
Test for goodness of fit of frequencies to a 1:2 ratio.	_____	_____
Comparison of mean ATP content of cells from muscle and liver tissue	_____	_____

2. If you conclude, at $\alpha = 5\%$, that the correlation of serum cholesterol with calcium deposition is not significant, the question of Type II will arise.

To reduce Type II error, you would need to (raise/lower) the sample size. Circle correct answer.

3. An entomologist obtains a sample correlation of $r = -0.5$ between egg number and survival in the corn earworm *Heliothis armigera*. Compute the explained variance.