

1. From the following table, compute the mortality risk (% killed), the relative risk at high relative to low seal abundance, the mortality odds [risk / (1 - risk)], and the mortality odds ratio at high seal abundance relative to low.

	Seal abundance			
	Low	High		
Surviving	8	32		
Killed	8	8		
Odds	_____	_____	Odds ratio	_____
Risk	_____	_____	Relative risk	_____

2. Write a generalized linear model (binomial error, logit link) to compare survival in two types of mosquito, controlled for body size. Be sure to assign a symbol and name to all variables, both response and explanatory.

3. An agricultural experiment station completes an experiment with 4 treatments in each of 3 different fields, and 2 measurements per treatment.

State the sample size n _____

List explanatory variables with name and symbol, then state whether each is random or fixed factor.

Write a general linear model to test for treatment effects, where the response variable is a canola yield in kg/hectare. Show degrees of freedom beneath each term in the model.

Write a generalized linear model to test for treatment effects where the response variable is a count ranging from 0 to 8 flowers per plant.