

In a genetics experiment, the researcher mated two *Drosophila* fruit flies and observed the traits of 300 offspring. The results are shown in the table below.

		Wing Size	
		Normal	Miniature
Eye Color	Normal	140	6
	Vermillion	3	151

One of these offspring is randomly selected and observed for the two genetic traits. Determine the following probabilities. Round your answers to three decimal places.

- (a) What is the probability that the fly has both normal eye color and normal wing size?
- (b) What is the probability that the fly has vermillion eyes?
- (c) What is the probability that the fly has normal eye color, given the fly has miniature wings?
- (d) What is the probability that the fly has either vermillion eyes or miniature wings (or both)?