

### The Problem

Jonathan and Tiana are collecting creatures for a science project. So far they have spiders, flies, and worms. Mr. Logan, their science teacher, asked them how many of each they had. Having just come from algebra class, they said, “We have 18 creatures in all, and the total number of legs is 68.” Can Mr. Logan determine how many spiders, flies, and worms Jonathan and Tiana have? Is there more than one possible solution to the problem? If so, find all possible solutions.



### Strategies and Hints

1. Identify what you know about all the creatures.
2. Break the problem into parts.
3. Making a table will be helpful.

### Extension

Create a similar problem with other animals. For example, suppose the creatures are mice, beetles, and spiders. How many of each are there, if there were 8 animals in all with a total of 44 legs?