## Heads, Legs, and Tails



1. Mia has rabbits, cats, and dogs. All the animals together have 40 legs. How many ears do they have?
2. There are some hens and cats in a yard. Together they have 15 heads and 10 wings. How many legs do they have?
3. There were some cats and some mice that together had 14 heads. Each cat ate one mouse. Now there are 10 tails. How many cats are there?
4. There are five dragons in Dragonland. Some of them have 3 heads and others have 4 heads each. Together they have 17 heads. How many 3-headed dragons and how many 4-headed dragons are there in Dragonland?

5. There are some cats and some hens in the yard. Together they have 10 heads and 26 legs. How many cats and how many hens are there?

6. There are 30 students at the Sea School. Each student is either a starfish or an octopus. Each starfish has five legs and each octopus has eight legs. Altogether they have 186 legs. How many starfish and how many octopuses are there at this school?

7. One day Alice and her little brother Bob went to a petting zoo. There were pigs, sheep, goats there, and ducks. Bob counted 43 legs, but Alice said that could not be right although she did not count anything. How did she know?
8. There are equal numbers of dogs, hens, and ducks in the yard. Together, they have 112 legs. How many birds are there in the yard?

9. There are some dogs and some ducks in the yard. All the dogs together have the same number of legs as all the ducks together. The total number of animals is 24 . How many dogs and how many ducks are there?
10. In a magical kingdom there are dragons with two heads and dragons with three heads. There are three times as many dragons with two heads as dragons with three heads. Altogether, all the dragons have 27 heads. How many dragons are there in this kingdom?
11. There are one-headed, three-headed, and four-headed dragons in a kingdom. A knight cuts one head off each dragon every day. On the first day, the knight cut off 10 heads. On the second day, he cut off 8 heads. At that point 11 heads remained. How many dragons of each kind were there originally?
12. In a kingdom far-far away, there are 3-headed green dragons and 5-headed brown dragons. Each time a head is cut off a green dragon, two new heads grow. Each time a head is cut off a brown dragon, three new heads grow. Initially, all dragons together in the kingdom had 45 heads. A knight cut one head off each dragon. Now there are 62 heads. How many dragons of each color are there?

