

A Live Problem

One day there were 5 species of animals in my pasture: alpacas, llamas, cows, sheep, and peafowl. There were 23 animals with a total of 84 legs. There were 17 ovines and camelids. The number of sheep is twice a prime number, but if I don't count the one baby lamb the number of sheep is prime. If I have one more lamb, the number of sheep will still be composite. There were twice as many alpacas as llamas. Find the number of animals of each species in the pasture. Note: each animal has the proper number of legs for its species.