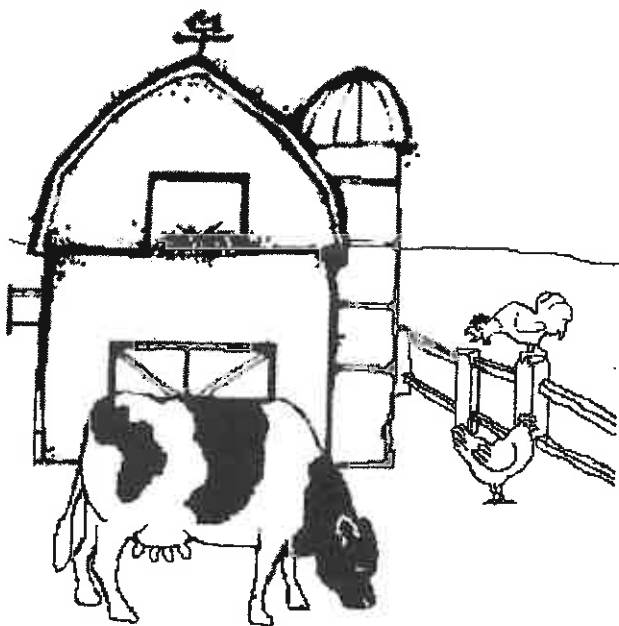


# POW #7

## OLD MACDONALD

Old MacDonald raises cows and chickens. The animals have a total of 36 heads and 126 feet. How many cows and how many chickens does Mr. MacDonald have?



### POW GUIDELINES

Number and label the 4 parts of your write-up.

**1. Complete heading.**

**2. Problem Statement.**

In your own words, tell what you are asked to do—include the essential details and the question.

**3. Process.**

Show all your work. Refer to the problem to give reasons for each step. Write enough (several paragraphs) to show that you really tried to solve the problem.

**4. Solution.**

Write your answer in a sentence which refers to the problem. Explain why your answer makes sense. Show a check if you can.

**5. Evaluation.**

Write complete sentences to answer these questions:

- How do you feel about this POW? Why?
- Did anyone help you?
- Does this remind you of any other problem?
- Tell one thing you learned.
- What rubric score should you get? Why?

**EXTENSIONS.** (Extensions are optional) If the POW is easy for you, try the extensions. Write a paragraph for each—the extensions do not require 4-part write-ups.

**FIRST EXTENSION:** How many different combinations of bicycles and tricycles are possible if there are 31 wheels altogether? Discuss the patterns in your solutions.

**SECOND EXTENSION:** Make up a similar problem about octopuses and squids. Each octopus has 8 tentacles and each squid has 10 tentacles.