



Concept : Guess & check (Using assumption)

In a farm, there were 50 cows and chickens.
Given that they had a total of 146 legs altogether, how many cows were there?

- 1) For assumption method, we will assume that all of the animals are the **animal with the lesser number of legs** (which are the chickens for this question).

So assuming all 50 were chicken, how many legs will they have altogether?

$$50 \text{ chickens} \times 2 \text{ legs} = 100 \text{ legs}$$

- 2) But the question states that there were 146 legs altogether. So, what will do to the 46 extra legs?

We will give 2 legs each to some of the 50 chickens so that they will become cows. But remember, each chicken will need 2 more legs to become a cow since each cow has 4 legs.

$$\text{So take } 46 \text{ legs} \div 2 = 23 \text{ pairs of legs}$$

So out of the 50 chickens, 23 of them will get 2 extra pair of legs. So that 23 chickens will become cows.

Ans : 23 cows