



Problem of the Week

Problem A and Solution

Counting Birds

Problem

The Wildlife Centre did a bird count for one month. They counted a total of 828 birds. Their results are shown in the table below, but the count for the blue jays is missing.

Bird	Count
Sparrows	234
Chickadees	317
Blue Jays	?
Cardinals	123

- (a) How many blue jays did they count?
- (b) Did they count more sparrows and blue jays combined than chickadees and cardinals combined?

Solution

- (a) From the information in the table, we can find the total number of sparrows, chickadees, and cardinals is equal to $234 + 317 + 123 = 674$. Since they counted a total of 828 birds, we can find the number of blue jays by subtracting the total number of the other birds from the overall total number of birds. That is, $828 - 674 = 154$.

Therefore, they counted 154 blue jays.

- (b) They counted $234 + 154 = 388$ sparrows and blue jays combined. They counted $317 + 123 = 440$ chickadees and cardinals combined. So they counted more chickadees and cardinals combined.

Alternatively, from the given data we know that they counted $317 + 123 = 440$ chickadees and cardinals combined. Since 440 is more than half of 828, which is the total number of birds, then they must have counted more chickadees and cardinals.