Input Question

How many positive three-digit integers less than 500 have at least two digits that are the same?

Original Response

To solve this problem, I will count how many three-digit numbers less than 500 have at least two digits that are the same, and subtract that from the total number of three-digit numbers less than 500. The total number of three-digit numbers less than 500 is 4 × 10 × 10 = 400, since the first digit can be 1, 2, 3, or 4, and the second and third digits can be anything from 0 to 9.

…

Therefore, the number of three-digit numbers less than 500 that have no digits that are the same is 4 × 9 × 8 = 288. This means that the number of three-digit numbers less than 500 that have at least two digits that are the same is 400 − 288 = **112**.

ReAlign Response (Ours)

Analysis:
To solve the problem, we need to count …

Solution:
1. Calculate the total number of three-digit numbers less than 500 …
2. Count the number of three-digit numbers less …
3. Subtract the count of numbers with no same …

Explanation:
- The first digit can be 1, 2, 3, or 4, and the …

Result:
There are 112 three-digit numbers less than …

Conclusion:
There are **112** positive three-digit integers …