Simon has N cards. On the ith (1<=i<=N) card is written an integer x_i . He is selecting one or more cards from these N cards, so that the average of the integers written on the selected cards is exactly A. In how many ways can he make his selection?

Input Format

Given std input string as follows:

- NA
- X₁ X₂ ... X_N

Constraints

- 1<=N<=50
- 1<=A<=50
- 1<=xi<=50
- N, A, x_i are integers.

Output Format

Print the number of ways to select cards such that the average of the written integers is exactly *A*.

Sample Input 0

48 7989

Sample Output 0

5

Explanation 0

- The following are the 5 ways to select cards such that the average is 8:
- Select the 3rd card.
- Select the 1st and 2nd cards.
- Select the 1st and 4th cards.
- Select the 1st, 2nd and 3rd cards.
- Select the 1st, 3rd and 4th cards.
- The answer may not fit into a 32-bit integer.