$$\mu_A(x) = \begin{cases} 0 & x < a_1 \\ 1 & a_1 \le x \le a_2 \\ 0 & x > a_3 \end{cases}$$

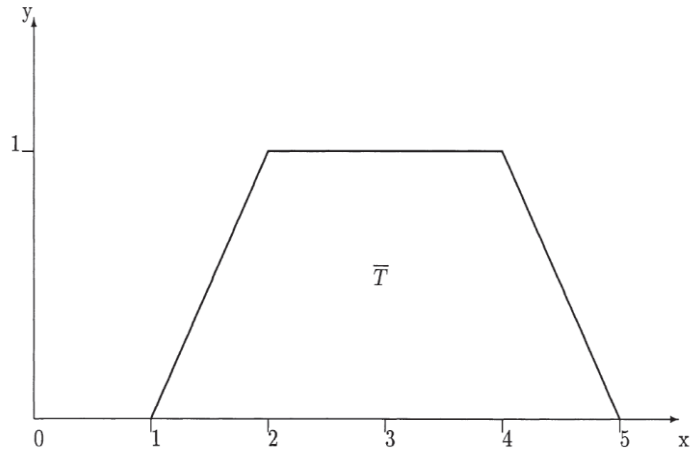

Figure 4.2: Approximately Two to Four

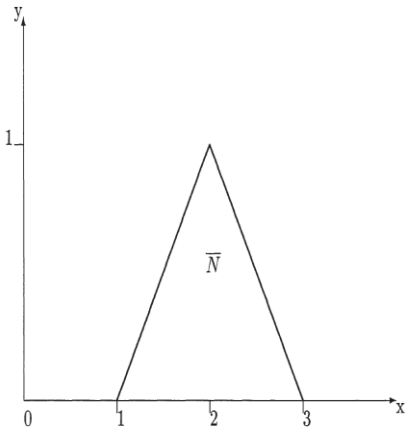

Figure 4.1: Approximately Two

Operation of fuzzy interval

$A = [a_1, a_3], B = [b_1, b_3] \forall\ a_1, a_3, b_1, b_3 \in R$

- **Addition**

$[a_1, a_3](+)\ [b_1, b_3] = [a_1 + b_1, a_3 + b_3]$

- **Subtraction**

$[a_1, a_3](-)\ [b_1, b_3] = [a_1 - b_3, a_3 - b_1]$

- **Multiplication**

$[a_1, a_3](\cdot)\ [b_1, b_3] = [a_1 \cdot b_1 \wedge a_1 \cdot b_3 \wedge a_3 \cdot b_1 \wedge a_3 \cdot b_3\ ,$

$a_1 \cdot b_1 \vee a_1 \cdot b_3 \vee a_3 \cdot b_1 \vee a_3 \cdot b_3\ ]$