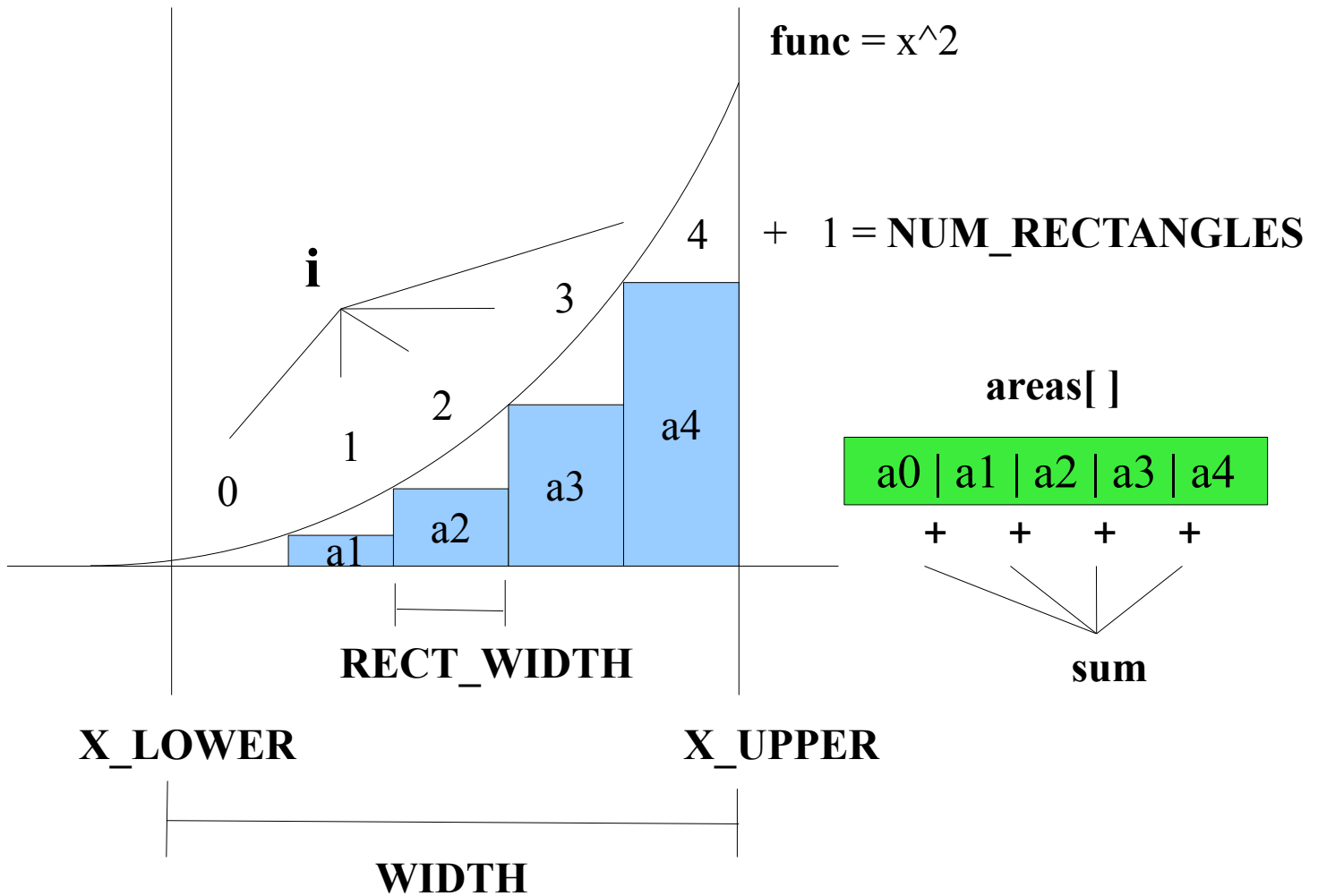


# Area Under Curve



## Constants

- o  $\text{func}$
- o  $X\_LOWER$
- o  $X\_UPPER$
- o  $WIDTH = X\_UPPER - X\_LOWER$
- o  $NUM\_RECTANGLES$
- o  $RECT\_WIDTH = WIDTH / NUM\_RECTANGLES$

## Variables

- o  $i$
- o  $\text{areas}[ ]$
- o  $sum$

## Serial Algorithm

- o for each rectangle ( $i$ ),
  - calculate the area ( $RECT\_WIDTH * \text{func}(i * RECT\_WIDTH)$ ).
  - insert the area into the array.
- o sum the array.
- o print the sum.