

# Function for Slope

$$m = \begin{cases} 10, & 0 \leq x \leq 10 \\ 40, & 11 \leq x \leq 60 \\ 40 - (x - 60), & 61 \leq x \leq 100 \end{cases}$$

Calculating total widgets

$$f(x) = m \times$$

Answer is equal to:  $\int_0^{\text{user input}} f(x)$

## Additional Notes

- user input must be between 0 - 100
- provide clear instructions to user
- Give error message if wrong input is given

Def slope(days)  
x gives slope on given day

Find widgets given slope

if (day 0 - 10)

day \* slope = widget

elif (day 11 - 60)

widget = ((day - 10) \* slope) + (day = 10)

else

m = slope @ 60

while (day over 60 > 0)

m += 40 (day over 60 - 60)

day over 60 - 1