

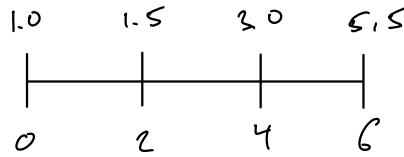
How much chocolate is on the wafer?

λ = density of chocolate in g/cm

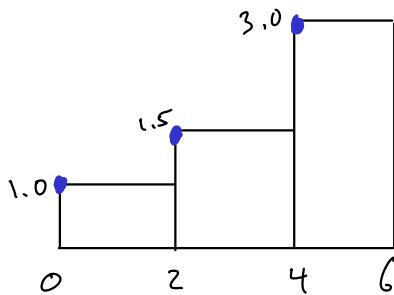
(I)

x	λ
0	1.0
2	1.5
4	3.0
6	5.5

(II)

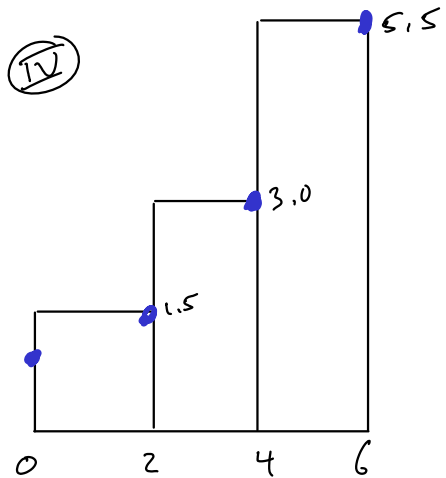


(III)



$$2 + 3 + 6 = 11g$$

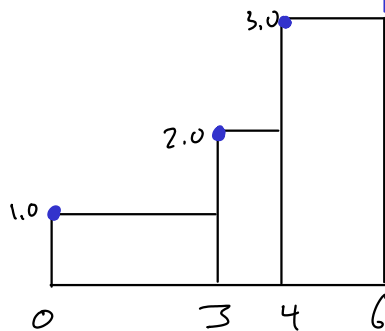
(IV)



$$3 + 6 + 11 = 20g$$

(V)

x	λ
0	1.0
3	2.0
4	3.0
6	5.5

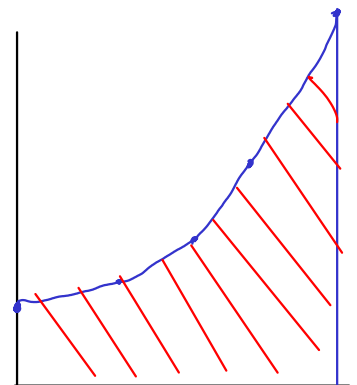


$$\sum \lambda \Delta x$$

$$3 + 2 + 6 = 12g$$

(VII)

chocolate (g)



"area" under graph

(VI)

$$\lambda = \frac{1}{8}x^2 + 1$$

$$\Rightarrow \int_0^6 \lambda dx = \frac{x^3}{24} + x \Big|_0^6 = 15g$$

Chop & add!

$$d(\text{chocolate}) = \lambda dx \quad \text{on each piece}$$

