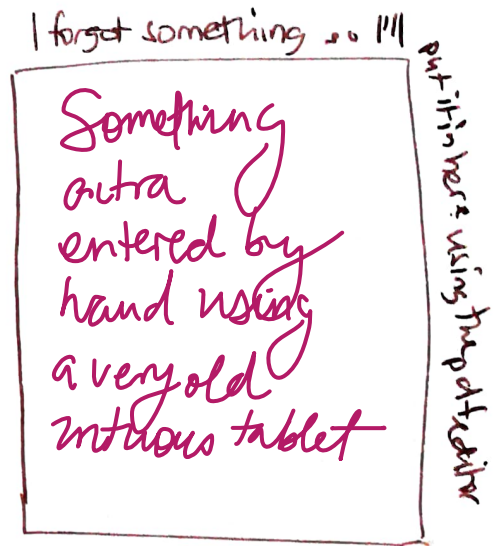
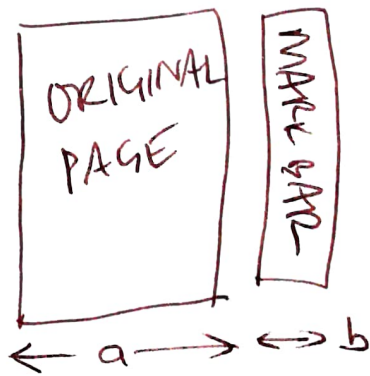


A1 (a) This is an answer to a question on how to add marking boxes to a pdf. They should appear somewhere over there \longrightarrow

(b) But actually, if we drew a diagram, we might see this.



(c) The maths for the width is trivial

$$w = a + b.$$

OR:

$$\int_0^{a+b} dl = a + b$$

which is what we expect.

A2 (a) We start with an exponential

$$e^{-\alpha x} = A(x)$$

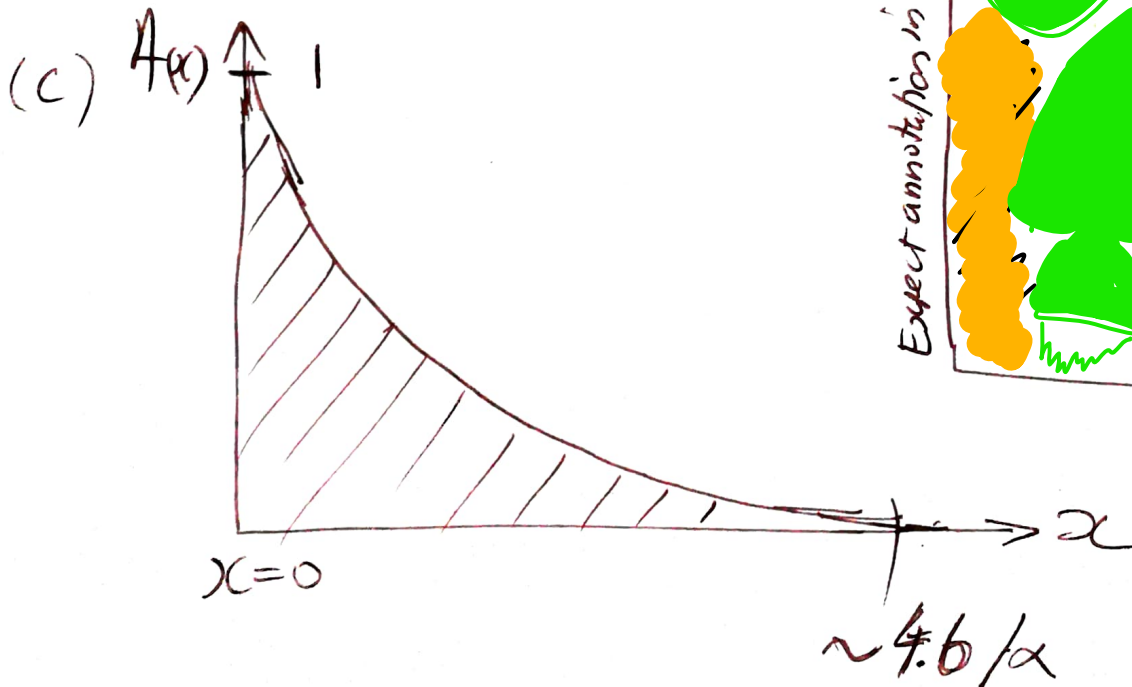
Then make up some conditions to complete the specification, such as

$$\alpha \leq \alpha_{\max}, \text{ and}$$

$$\alpha \geq \alpha_{\min}.$$

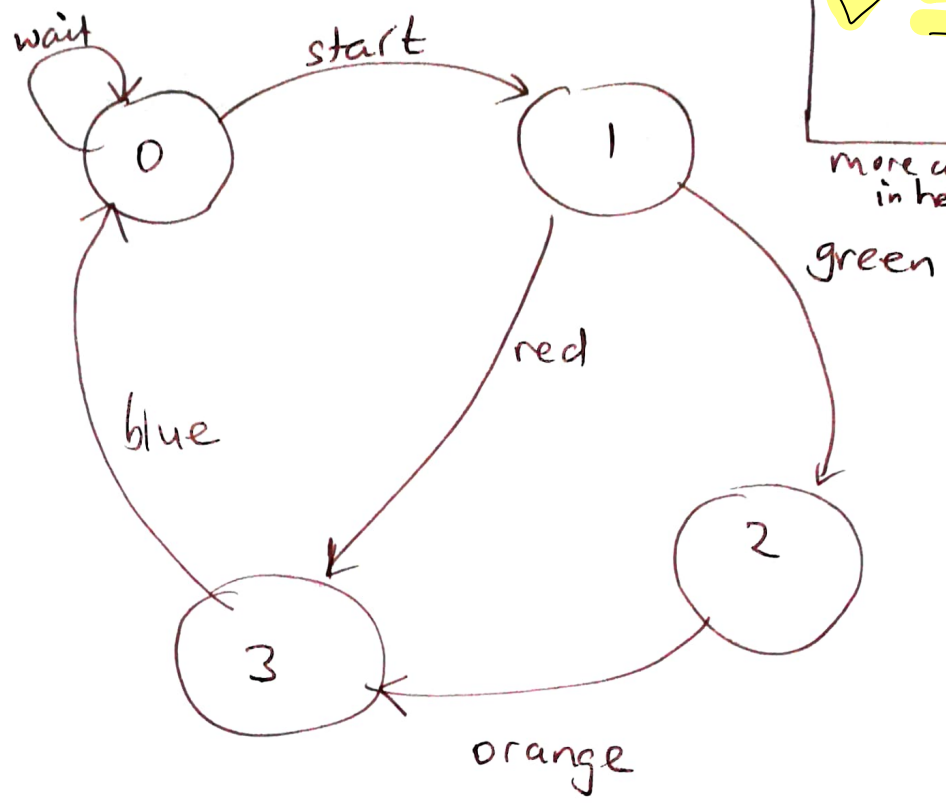
(b) Again, not rocket science that

$$\alpha_{\min} \leq \alpha \leq \alpha_{\max}$$



B1

(9)



$$V = \frac{W}{2}$$

more annotation in here

"The coloured states are numbered starting at zero" makes no sense because the edges have colour names, and these represent transitions.

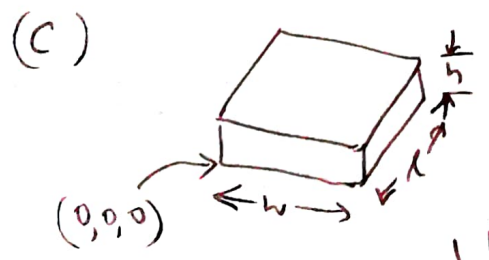
I'll edit/annotate in this box electronically

(b) $\overline{A+B} = \overline{A} \cdot \overline{B}$
 $A = A(B+\overline{B})$

$$\oint V dv = 0$$

kind of makes it a bit simple.

because I forgot something, oops.



$$\oint_V \Psi_v dv = \int_0^h \int_0^l \int_0^w \Psi(x,y,z) dx dy dz$$

$$\Psi(x,y,z) = x + 2y - z^2$$