A2 (a) We start with an exponential
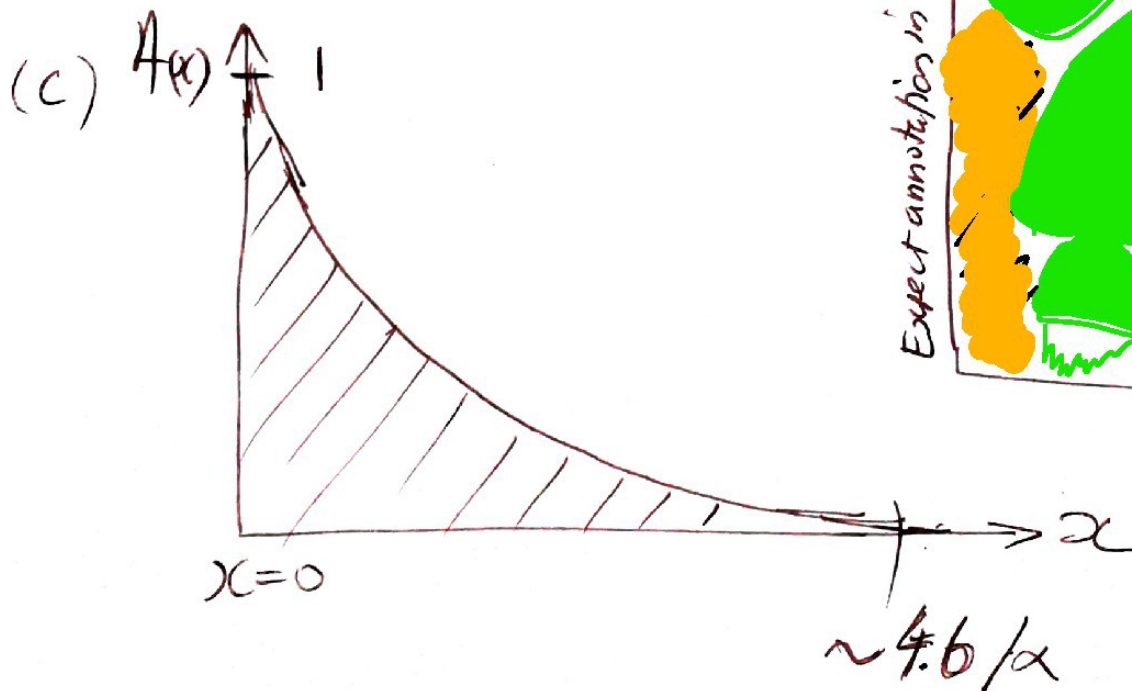
$$e^{-\alpha x} = A(x)$$

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

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

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

(b) Again, not rocket science that

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

(c)

Expect annotations in this box