



### 3. Exponential decay

Consider a model for exponential decay corresponding to the following equation:

$$y(t) = Ae^{-t/h}$$

where  $h$  is the exponential decay timescale,  $t$  is time and  $A$  is a constant.

By taking the natural log of both sides show that

$$\log y = \text{constant} - t/h$$

What do you expect a plot of  $t$  vs  $\log y$  to look like? What sets the slope on such a plot?