

# Exponential Growth and Inhibited Growth

Session 4.

$$a) \frac{dy}{dx} = ry \Rightarrow \frac{dy}{y} = rdx \Rightarrow y = ae^{rx}$$

$$b) \frac{dy}{dx} = ry(s-y) (s>0) \Rightarrow \left| \frac{y}{s-y} \right| = ae^{sx+cx} \Rightarrow y = \frac{sae^{sx}}{1+ae^{sx}}$$