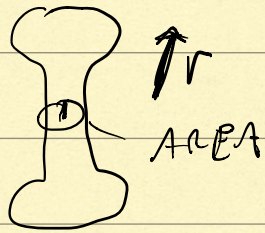
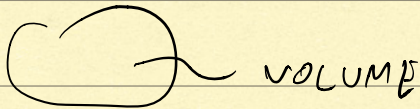
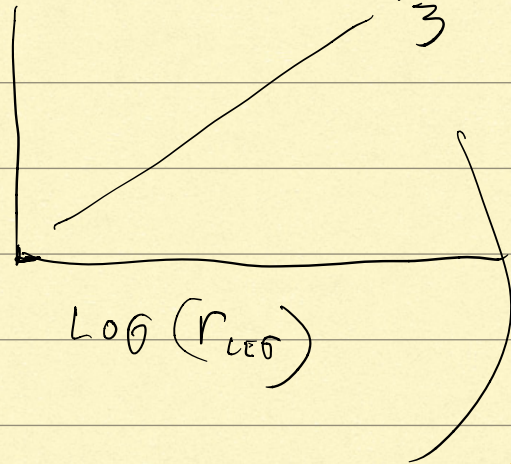


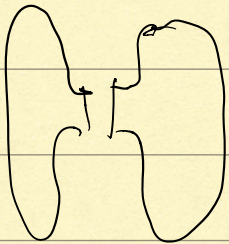
EX ALLOMETRIC SCALING



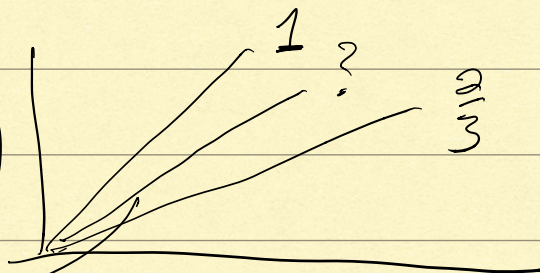
$\log(r_{body})$



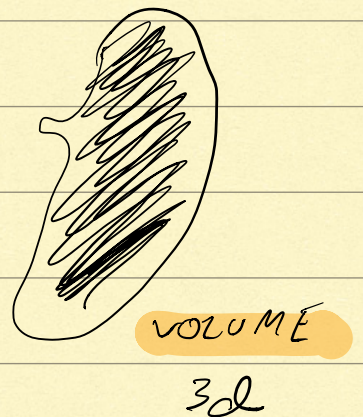
$$r_{body} = 3.7 \uparrow r_{leo}^{\frac{2}{3}} + ?$$



$\log(METABOLIC RATE)$



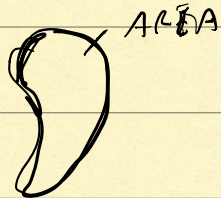
$\log(MASS)$



EX PS7 CELL VOLUME



MITOCHONDRIA
VOLUME

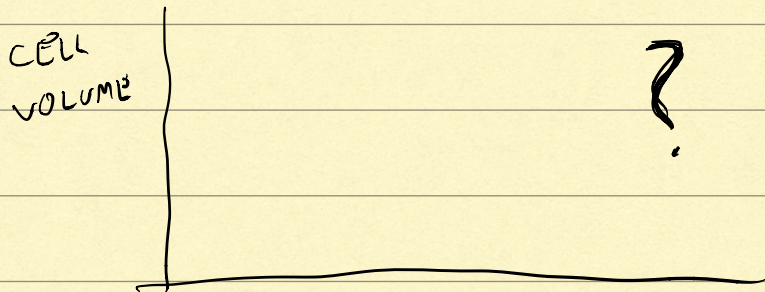


AREA



$$r_{MITO}^2 \propto r_{CELL}^3 ?$$

$$r_{MITO}^3 \propto r_{CELL}^3 ?$$



MITO VOLUME

• LINEAR

$$V_{CELL} = a V_{MITO} + b$$

• EXPONENTIAL

$$V_{CELL} = a e^{b V_{MITO}}$$

$$V_{CELL} = a V_{MITO}^b$$

$$V_{CELL} = a V_{MITO}^b + \epsilon$$

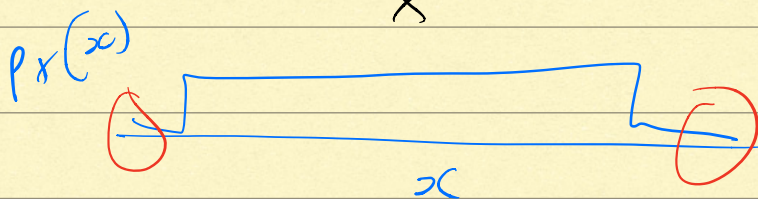
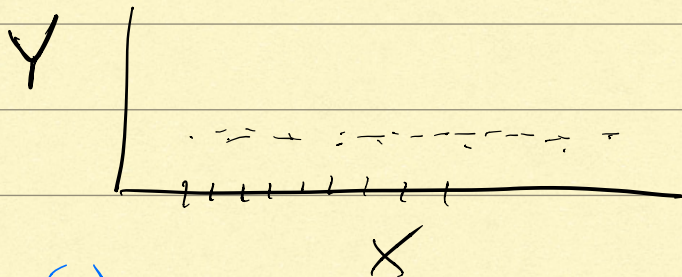
← NOISE

$$\log V_{CELL} \approx \cancel{b \log a} V_{MITO}^b \quad \log (a V_{MITO}^b)$$

$$= b \log V_{MITO} + \log a$$

$$\log V_{\text{CELL}} = \log (a V_{\text{MRO}}^b + c)$$

PS7 PART 3



WHAT SET OF X
GIVES

WORSE ERROR?

