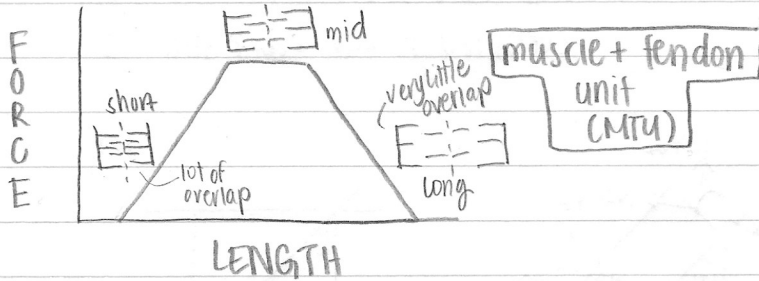
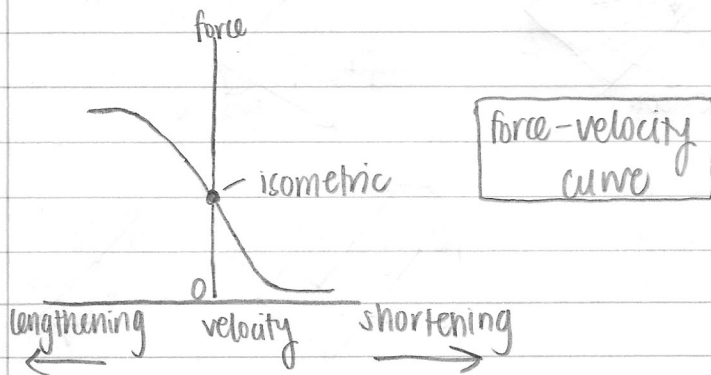


(10-23)

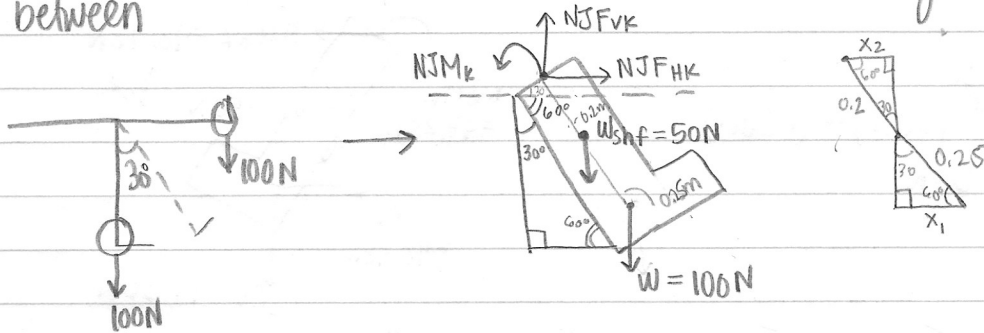
- specificity of training → training certain muscles in specific movement types
- ↳ want to get stronger? increase weight and/or increase the moment arm



→ mid range length is max force (perfect overlap of actin and myosin)



- taking the two conditions from last week and looking at the angle in between



$$\sum F_H = ma_H = 0 \rightarrow 0 = NJF_{HK} \rightarrow \text{no H force}$$

$$\sum F_V = ma_V = 0 \rightarrow 0 = NJF_{VK} + W_{sf} + W$$

$$NJF_{VK} = -(-50N) - (-100N) = 150N$$

$$\sum M_{cm} = I_{cm} \alpha = 0 \rightarrow$$

$$0 = NJM_k + (NJF_{VK} \cdot l_{d_2}) + (W \cdot l_{d_1})$$

$$+ NJM_k = + (150N \cdot \sin 30^\circ \cdot 0.2m) + (100N \cdot \sin 30^\circ \cdot 0.25m)$$

$$= 15Nm + 12.5Nm$$

$$NJM_k = 27.5 Nm$$

