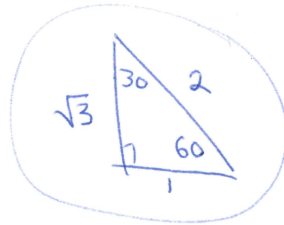
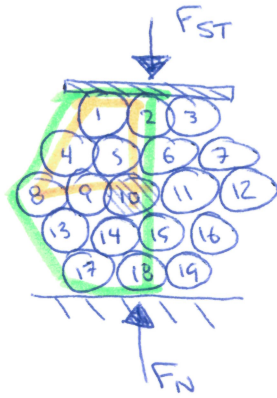
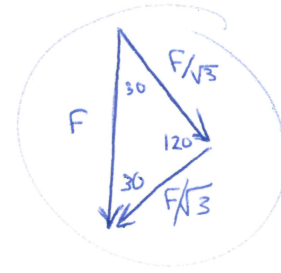
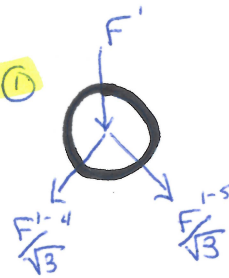


$$F_N = F_{ST}$$



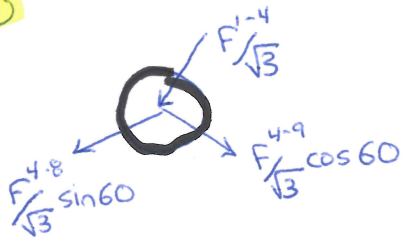
①



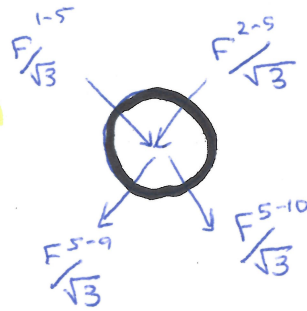
②



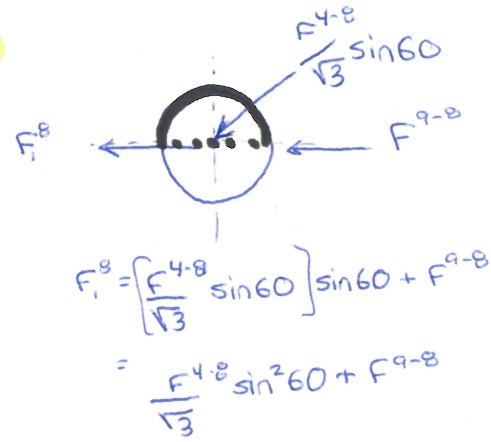
④



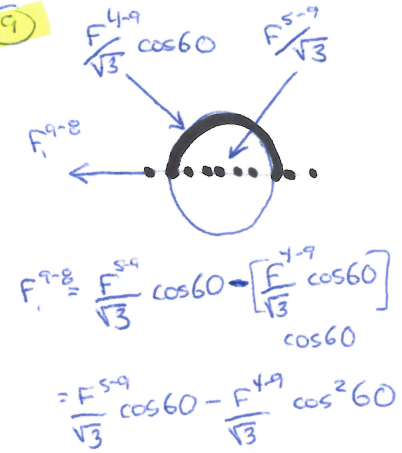
⑤



⑧



⑨



* multiplying by 2 as each $\frac{1}{2}$ = the same for the forces gives:

$$F_T^8 = 2 \left(\frac{F}{\sqrt{3}} \sin^2 60 + \frac{F}{\sqrt{3}} \cos 60 - \frac{F}{\sqrt{3}} \cos^2 60 \right)$$

$$= \frac{2F}{\sqrt{3}} (0.75 + 0.5 - 0.25)$$

* ⑩ is in equilibrium

$$= \frac{2F}{\sqrt{3}} \rightarrow 1.155F$$

this is the force that the bunding straps have to withstand to hold the bundles together

$$\text{where } F_{ST} = 3F$$