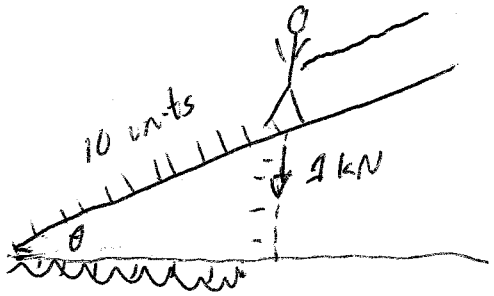
FORCE ALONG SLOPE

GRAPH

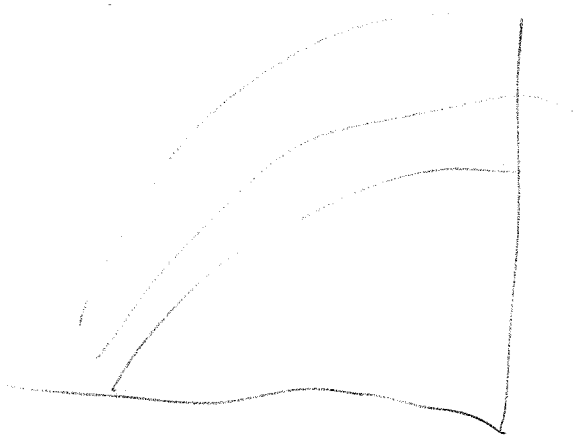


TRIG $\sin(\theta)$

memorize Table:

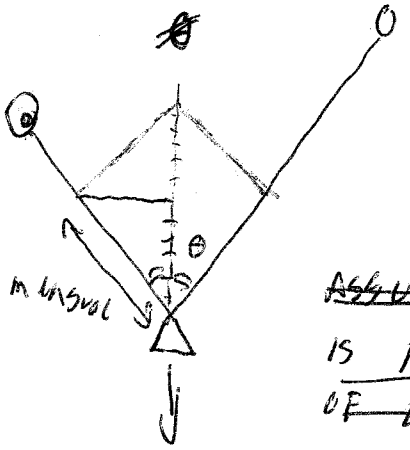
Slope Angle		FORCE	LOAD ON 1 mm
Very low angle	0° - 20°	0 %	6 person
		34 %	
low angle	20° - 30°		4 person
		50 %	3 person
steep angle	40° - 50°	64 %	
		77 %	2 person
high angle	90°	100 %	

GRAPH
LOOK UP



FORCE ON ANCHOR LEGS

VECTOR ADDITION



~~ASSUME INTERIOR ANGLE~~ IS ~~BISECTED BY DIRECTION OF LOAD~~. 50% ~~CARRIED BY~~ EACH ~~LEG~~. ~~DISTRIBUTED TO~~

DISTRIBUTED TO LEG i

$$D_i = \frac{\cos(\theta_i)}{\sum_{j=1} \cos(\theta_j)}$$

TRIG $\frac{1}{\cos\left(\frac{\theta}{n}\right)} \cdot D_i$

TABLE MEMORIZE ASSUME BISECTS.

	INTERIOR ANGLE	FORCE ON EACH LEG ~~ANCHOR~~
	0°	50%
	30°	52%
	60°	58%
MAX	90°	71%
	120°	100%
	150°	193% (200%)
	180°	∞

FORCE ON ANCHOR LEGS