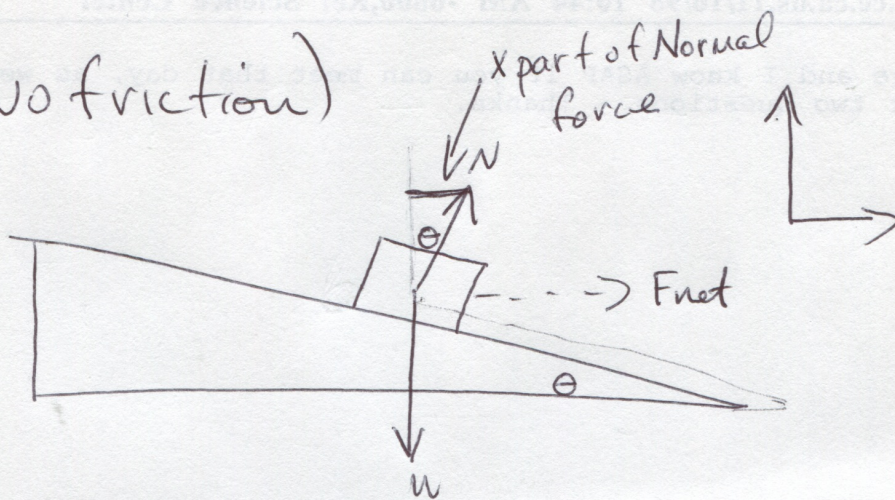


SI #7 CM

6a (No friction)



$$60 \text{ mph} \Rightarrow 88 \text{ ft/s}$$

$$r = 1000 \text{ ft}$$

	x	y
N	$N \sin \theta$	$N \cos \theta$
W	0	-W
f_{net}	$m \frac{v^2}{r}$	0

$$N \sin \theta = m \frac{v^2}{r}$$

$$N \cos \theta = mg$$

$$\tan \theta = \frac{v^2}{rg} = \frac{88^2}{1000(32)}$$

$$\theta = \tan^{-1} \frac{7744}{32,000} = \tan^{-1} 0.242$$

$$\theta = 13.6^\circ$$