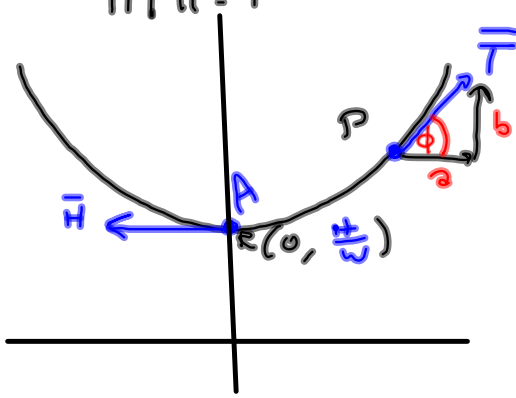

$\bar{T}$ = tension vector

$\|\bar{T}\| = \sqrt{a^2+b^2}$

$H = \|\bar{H}\| = a = T\cos\phi$

w = wt per unit length

$P = (x, y) = (x, \frac{H}{w}\cosh(\frac{w}{H}x))$

$\frac{dy}{dx} = \sinh(\frac{w}{H}x) = \tan\phi$ = slope.

b. Show that $T = wy = w\frac{H}{w}\cosh(\frac{w}{H}x)$

$= wH$

$y = \frac{H}{w}$