# PROJECTILE MOTION *Tilted surface 2*

This just illustrates the bogus solutions possible if no checking is done

$g := 9.8 \quad v_0 := 10 \quad y_0 := 10 \quad \theta := 30\,\frac{\pi}{180} \quad \phi := 45\,\frac{\pi}{180} \quad y_H(x) := \tan(\phi)\,x + y_0$

$$y_P(x) := \left[ \frac{-g}{2\left(v_0 \cos(\theta)\right)^2} x^2 + \tan(\theta)\, x + y_0 \right]$$

for 45 deg

$x := -10, -9.99 .. 5$

for -65 deg

$x := 0, 0.1 .. 50$