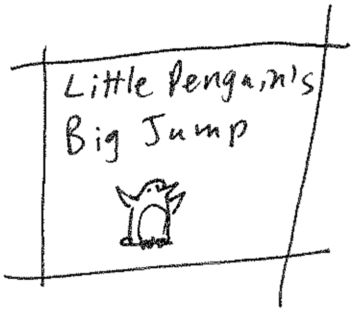
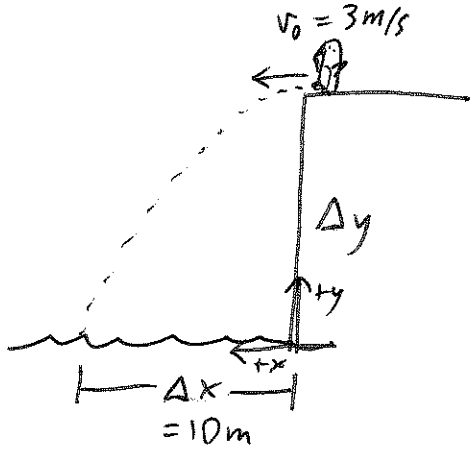


Let's start by drawing it...



The penguin has run horizontally off the iceberg/cliff, so its velocity at first is all in the x-direction. Let's write our knowns in a table, separately for x and y dimensions:

x	y
$a_x = 0 m/s^2$	$a_y = 9.8 m/s^2$
$v_{0x} = 3 m/s$	$v_{0y} = 0 m/s$ — because penguin runs horizontally, at first it has no downward motion.
$\leftarrow v_x = 3 m/s$	$v_y = ?$
$\Delta x = 10 m$	$\Delta y = ?$ — This is our end goal!

x-velocity does not change with time!

$t = ?$

Now I take a look at the equations of motion:

$v = v_0 + at \quad \Delta x = v_0 t + \frac{1}{2} a t^2 \quad v^2 = v_0^2 + 2a\Delta x$

I don't quite have enough information to solve for Δy, because I don't know enough in the y dimension. BUT, vertically I see that I can solve for time!

... And this will give me enough information in the y direction to determine Δy.

So I solve for time in the x dimension:

$$\Delta x = v_0 t + \tfrac{1}{2} a t^2$$

$$10m = 3\tfrac{m}{s} t + \cancel{\tfrac{1}{2}(0)t^2}$$

ZERO!

$$10m = 3\tfrac{m}{s} t$$

$$\boxed{t = \tfrac{10}{3}\,s = 3.3\,s}$$

Now do I have enough info to determine Δy? YES! I have v_{0y}, a_y, and t so can solve

$$\Delta x = v_0 t + \tfrac{1}{2} a t^2 \Rightarrow \Delta y = v_{0y} t + \tfrac{1}{2} a_y t^2$$

(Rewritten for y-dimension)

$$\Delta y = \cancel{(0)(3.3)} + \tfrac{1}{2}(-9.8)(3.3)^2$$

$$\boxed{\Delta y = -53.4\,m}$$

Poor penguin!