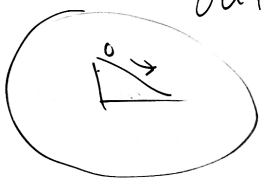
$2gh = v^2$ $g = 9.8 \frac{m}{s^2}$

$v = \sqrt{2gh}$

Ramp 3 is the highest

closed, nothing goes in or out



$KE = \frac{1}{2}mv^2$

$GPE = mgh$

Conserved - Stays the same

Total energy stays the same. It's conserved

$E_1 = GPE_1$

$E_2 = GPE_2 + KE_2$

$\frac{mgh_1}{m} = \frac{mgh_2 + \frac{1}{2}mv_2^2}{m}$

$gh_1 = gh_2 + \frac{1}{2}v_2^2$

$E_1 = E_2$

$gh_1 - gh_2 = \frac{1}{2}v_2^2$

$2gh_1 - 2gh_2 = v_2^2$

$v_2 = \sqrt{2gh_1 - 2gh_2}$