

1. `mobject.applyForce(Vector(0.0, 0.0, 2.0*mobject.vely.z**2))`
2. Changes in Vely.z does not make any affect the value in Pos.z It's staying constant around 1.011186 untill Pos.z reaches zero.
- 3.

`friction = mobject.vely.norm().mult(-1.0).mult(coeff)`

`mobject.applyForce(friction)`

`mobject.applyForce(Vector(0.0,-20.0,4.0))`

`mobject.applyForce(Vector(0.0,-20.0,-8.0))`