Graphical user interface, text, application, email

Description automatically generated

A picture containing text

Description automatically generated

Graphical user interface, application

Description automatically generated with medium confidence

=

=

Background pattern

Description automatically generated

|a| =

= 8.31

Normalize (2,4,7) = (2/8.31, 4/8.31, 7/8.31)

= (0.24, 0.48, 0.84)

A picture containing table

Description automatically generated

acceleration = f/m

= (0,0,30/60)

= 0.5 per second

**position at timeframe x= current position + previous vector \* 0.1**

The position at 0.10 is [0+0\*0.1, 0+0\*0.1, 0+0\*0.1] = [0,0,0]

The vector at 0.10 is [0+0\*0.1, 0+0\*0.1, 0+0.5\*0.1] = [0,0,0.05]

The position at 0.20 is [0+0\*0.1, 0+0\*0.1, 0+0.05\*0.1] = [0,0,0.005]

The vector at 0.20 is [0+0\*0.1, 0+0\*0.1, 0.05+0.5\*0.1] = [0,0,0.1]

The position at 0.30 is [0+0\*0.1, 0+0\*0.1, 0.005+0.1\*0.1] = [0,0,0.015]

The vector at 0.30 is [0+0\*0.1, 0+0\*0.1, 0.1+0.5\*0.1] = [0,0,0.15]

The position at 0.40 is [0+0\*0.1, 0+0\*0.1, 0.015+0.15\*0.1] = [0,0,0.03]

The vector at 0.40 is [0+0\*0.1, 0+0\*0.1, 0.15+0.5\*0.1] = [0,0,0.2]

Graphical user interface, text, application

Description automatically generated

Graphical user interface, application

Description automatically generated

distance =

= 9.43

Graphical user interface, text, application

Description automatically generated

A picture containing text

Description automatically generated

Graphical user interface, text, application

Description automatically generated