PARTIAL PROJECT 2

JOSE LUIS ZAPATA CABELLO A01039893
GIANCARLO MONSIVAIS LEYVA A01570102
JAVIER ANTONIO ORTIZ QUIÑONES A01039938

INTRO

Good Evening Mrs. Nancy Herrera,

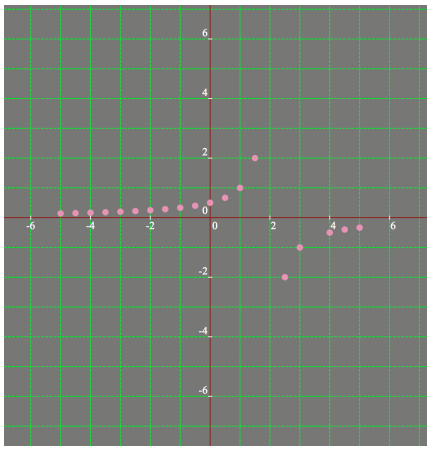
We come to the job to present to you a decent partial project and we came to the idea that the best way to start a project in a decent way was to create a formal intro, so saying no more, we are going to make a brief but formal analyze of what our project needs to contain.

As we are going to analyze each and every one of the values we are going to create a graph in Graphmatica which we are going to give the credits of our graphs, after we create our graphs we are going to make a brief but concrete analysis of each one so that it's easier to explain what is in everyone of them.

As you can see, until this point everything in our project is going well and we have already planned how we are going to create everything, we also came with the job to find out every formula so with everything that we learned in class we are going to do this, the knowledge has been given to us so we are going to use it in the best possible way.

To conclude our partial project, we are all one by one are going to give a proper conclusion of what was for us to make this project, we thank you for your attention and hope you enjoy our partial project which we clearly put all of our effort and mostly dedication so that you, our favorite teacher can enjoy it.

Thank you for your attention and we hope you find a pleasant experience by reading and analyzing our project.

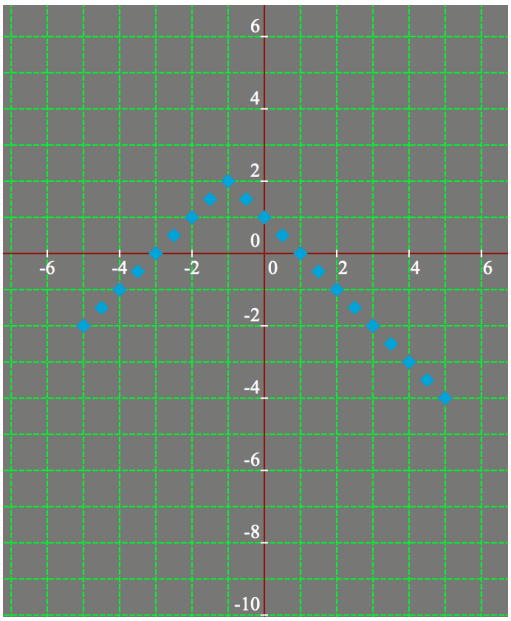


f(t) Position v Time

As we can see, the tendencies in this graph are measuring that the position is increasing exponentially in relation with time

```
y = 0.0053x^4 + 0.0025x^3 - 0.1561x^2 - 0.1288x + 0.7138
```

```
y=0.0212*x^3 + 0.0075*x^2 - 0.3122*x - 0.1288 ' deriv. of y = 0.0053x^4 + 0.0025x^3 - 0.1561x^2 - 0.1288x + 0.7138
```

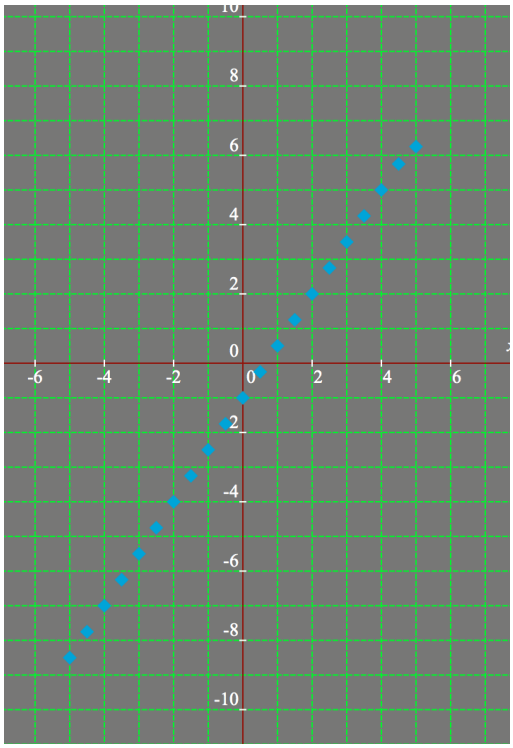


g(t) Velocity v Time

We can see in this graph that the Velocity is increasing into certain point, when it reaches this point the acceleration starts to decrease.

```
y = 0.0099x^4 + 0.0305x^3 - 0.3564x^2 - 0.69x + 1.2387
```

```
y=0.0396*x^3 + 0.0915*x^2 - 0.7128*x - 0.69 ' deriv. of y = 0.0099x^4 + 0.0305x^3 - 0.3564x^2 - 0.69x + 1.2387
```

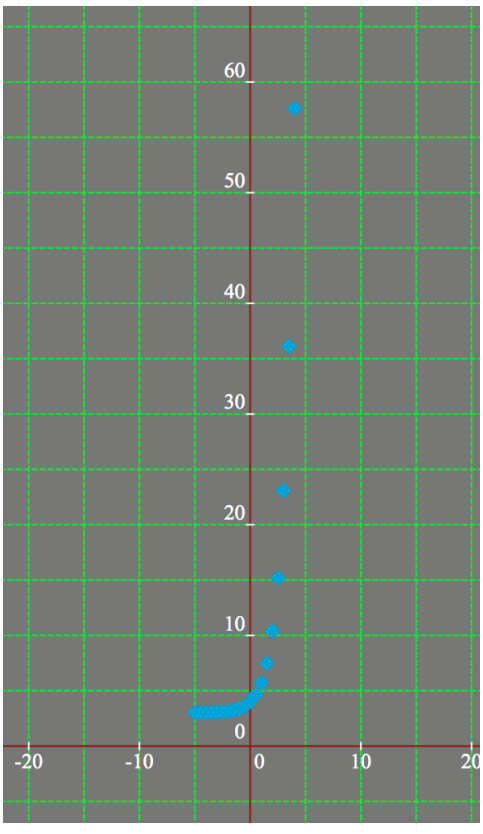


h(t)
Acceleration v Time

As we can see in this graph, the change is increasing with a continuous slope and we can say its a continuous change.

```
y = 1.5x - 1.0 '
```

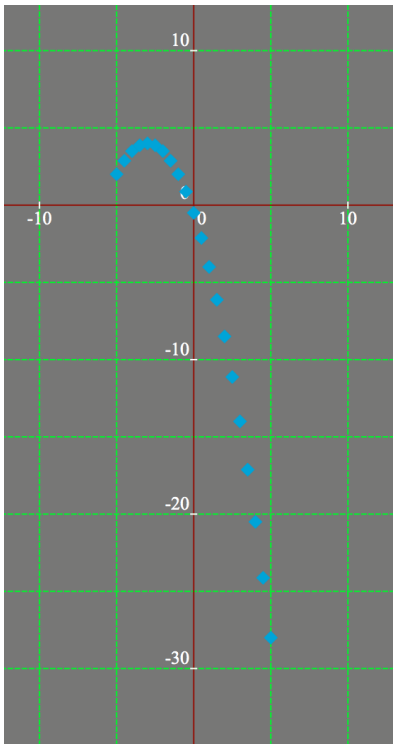
```
y=1.5 '
```



F(t) Position v Time

The changes in this graph are first really tighten but there comes a moment where the change in the points become exponential, the change in position changes in relation to time

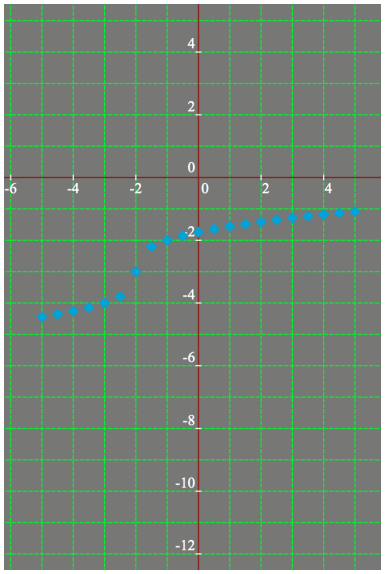
```
y = -0.1005x^4 + 0.0032x^3 + 3.3244x^2 + 4.4694x - 1.2546 '
y=-0.402*x^3 + 0.0096*x^2 + 6.65*x + 4.47 ' deriv. of y = -0.1005x^4 + 0.0032x^3 + 3.3244x^2 + 4.4694x - 1.2546
```



G(t) Velocity v Time

This graph shows an exponential decrease in the behavior of the points, so we can say that the rate of change is changing in high numbers.

```
y = -0.0285x^4 - 0.0648x^3 + 0.1652x^2 - 1.4819x - 0.9651 '
y=-0.114*x^3 - 0.1944*x^2 + 0.3304*x - 1.48 ' deriv. of y = -0.0285x^4 - 0.0648x^3 + 0.1652x^2 - 1.4819x - 0.9651
```



H(t) Acceleration v Time

We can see that the acceleration maintains a constant movement, then increases for a certain time then comes into a stability point again.ç

```
y = 0.0035x^4 - 0.0037x^3 - 0.1271x^2 + 0.4392x - 1.7031 '
y=0.014*x^3 - 0.0111*x^2 - 0.2542*x + 0.4392 ' deriv. of y = 0.0035x^4 - 0.0037x^3 - 0.1271x^2 + 0.4392x - 1.7031
```

Conclusions

Javier
I don't like graphs but these concepts help me to see how position, acceleration, time and velocity changes, so it's easier to recognize which graphic represent each concept. And describing these graphs let me see how they tend to be,

Giancarlo
Regarding what i think about this project, it was quite hard to understand graphs finding functions and inverses, determining how everything is connected between charts, it was hard but understandable, i think we did a good job and we are going for a 100 cause we did our 100%.

Jose Luis
With this project in my personal opinion I could learn to analyze every type of graph in the position, velocity, acceleration fields, it was easier to do this project after all of the things we saw in class, so in my personal opinion this was all possible because of the way our teacher goes further into the explanation of each of the topics, those little tips are the ones that help the most.

(n.d.). Retrieved October 11, 2017, from http://www.graphmatica.com/espanol/