Module 3 In-Class Programming Assignment #1

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EGR 101
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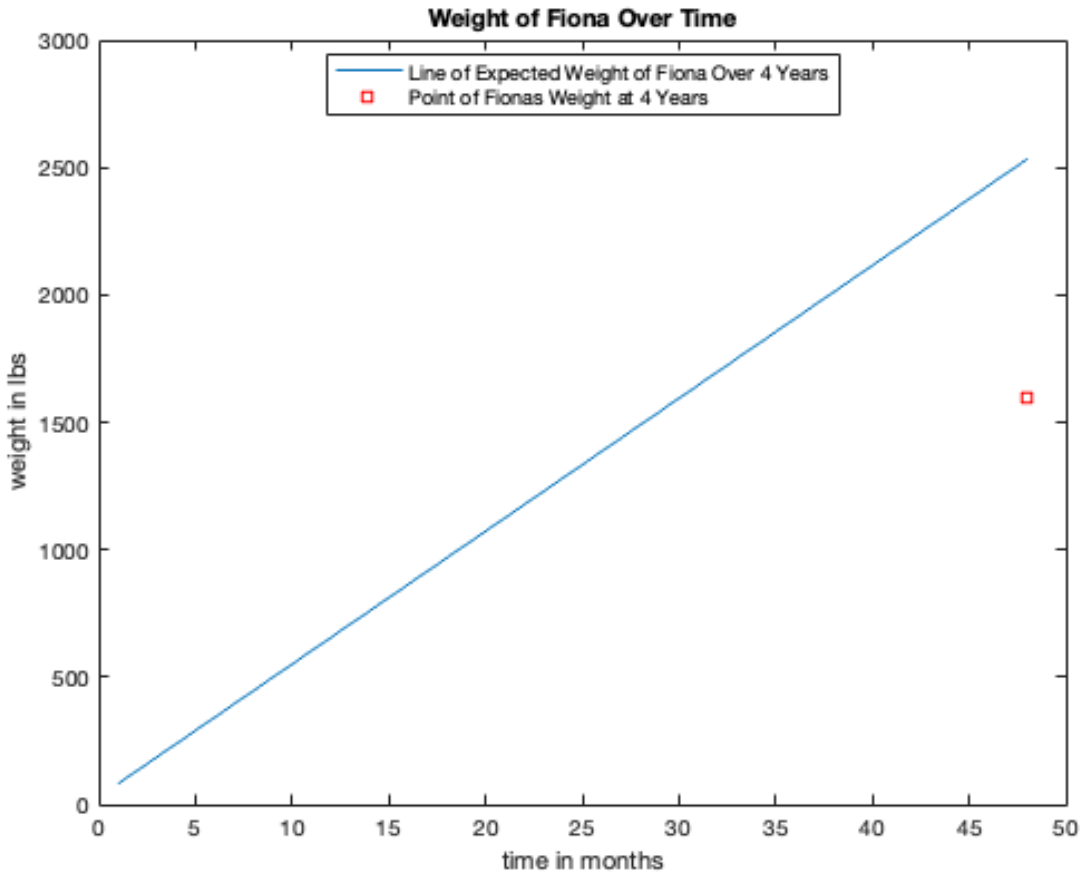
Months Array

```
InitialWeight = 29;
TimeSinceBirth = 1:48; %time since birth
WeightGain = [30, 53, 61.5, 76.5, 83, 42, 76, 49, 50, 20, 52, 33]; %weight
 gain [in pounds]

MWG = mean(WeightGain);% mean of the weight gain [in pounds]


expectedWeight = MWG *TimeSinceBirth + InitialWeight; %expected weight gain
```

Plot

```
x1 = 1:48; %1 through 48 months
y1 = expectedWeight; %the expected weight equation


x2 = 48; %4 years in months
y2 = 1600; %the weight in lbs



plot (x1, y1, x2, y2, 'rs') %plot of the graph
title 'Weight of Fiona Over Time' %the title of the graph
xlabel 'time in months' %the x label on the graph
ylabel 'weight in lbs' %the y label on the graph
legend('Line of Expected Weight of Fiona Over 4 Years','Point of Fionas Weight
 at 4 Years','location','best') %the legend of what the points mean

DiffBetweenExpVsActual = expectedWeight(end) - y2 %the y value differences
 betweeen the point and the y value of the line
```

```
DiffBetweenExpVsActual =
        933.00
```



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