

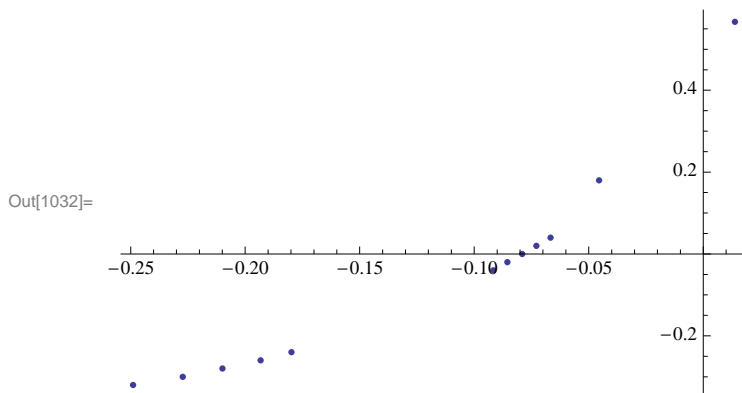
Delta

Tocka1 (x = -0.325)

```
In[1031]:= tocke1 = {{-0.24894,  $\frac{0.34}{0.5} - 1$ }, {-0.227272,  $\frac{0.35}{0.5} - 1$ }, {-0.209944,  $\frac{0.36}{0.5} - 1$ },  
{-0.193242,  $\frac{0.37}{0.5} - 1$ }, {-0.179798,  $\frac{0.38}{0.5} - 1$ }, {-0.0916223,  $\frac{0.48}{0.5} - 1$ },  
{-0.085503,  $\frac{0.49}{0.5} - 1$ }, {-0.0790764,  $\frac{0.5}{0.5} - 1$ }, {-0.0728524,  $\frac{0.51}{0.5} - 1$ },  
{-0.0666837,  $\frac{0.52}{0.5} - 1$ }, {-0.0454832,  $\frac{0.59}{0.5} - 1$ }, {0.0137923,  $\frac{0.59}{0.37645} - 1$ }}
```

```
Out[1031]= {{-0.24894, -0.32}, {-0.227272, -0.3}, {-0.209944, -0.28}, {-0.193242, -0.26},  
{-0.179798, -0.24}, {-0.0916223, -0.04}, {-0.085503, -0.02}, {-0.0790764, 0.},  
{-0.0728524, 0.02}, {-0.0666837, 0.04}, {-0.0454832, 0.18}, {0.0137923, 0.567273}}
```

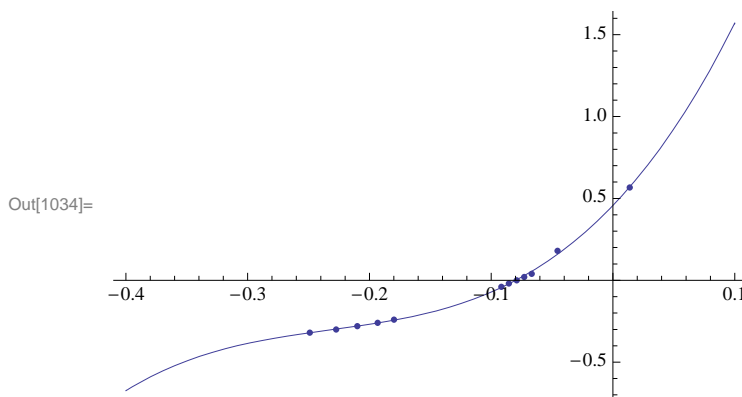
```
In[1032]:= ListPlot[tocke1]
```



```
In[1033]:= fit1 = FindFit[tocke1, d*x^3 + a*x^2 + b*x + c, {d, a, b, c}, x]
```

```
Out[1033]= {d -> 42.0075, a -> 29.2089, b -> 7.78996, c -> 0.456968}
```

```
In[1034]:= s1 = Show[ListPlot[tocke1], Plot[d*x^3 + a*x^2 + b*x + c /. fit1, {x, -0.4, 0.1}]]
```



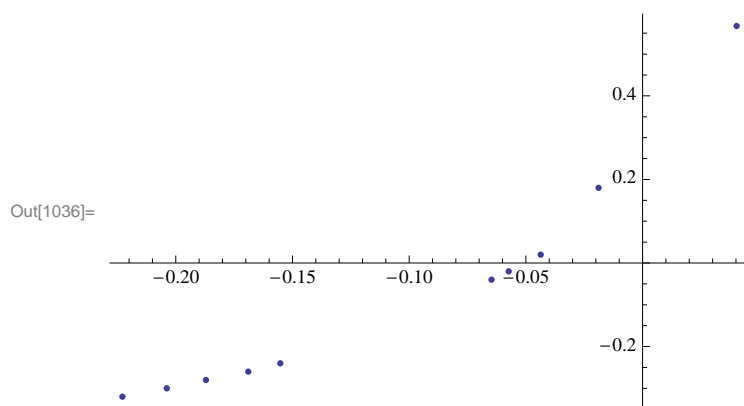
Tocka2 (x = -0.225)

In[1035]:= **tocke2** =

$$\left\{ \left\{ -0.222873, \frac{0.34}{0.5} - 1 \right\}, \left\{ -0.203898, \frac{0.35}{0.5} - 1 \right\}, \left\{ -0.18708, \frac{0.36}{0.5} - 1 \right\}, \left\{ -0.16895, \frac{0.37}{0.5} - 1 \right\}, \right. \\ \left. \left\{ -0.155189, \frac{0.38}{0.5} - 1 \right\}, \left\{ -0.0646842, \frac{0.48}{0.5} - 1 \right\}, \left\{ -0.0573267, \frac{0.49}{0.5} - 1 \right\}, \right. \\ \left. \left\{ -0.0436538, \frac{0.51}{0.5} - 1 \right\}, \left\{ -0.0188846, \frac{0.59}{0.5} - 1 \right\}, \left\{ 0.0402957, \frac{0.59}{0.37645} - 1 \right\} \right\}$$

Out[1035]= $\{ \{-0.222873, -0.32\}, \{-0.203898, -0.3\}, \{-0.18708, -0.28\},$
 $\{-0.16895, -0.26\}, \{-0.155189, -0.24\}, \{-0.0646842, -0.04\}, \{-0.0573267, -0.02\},$
 $\{-0.0436538, 0.02\}, \{-0.0188846, 0.18\}, \{0.0402957, 0.567273\} \}$

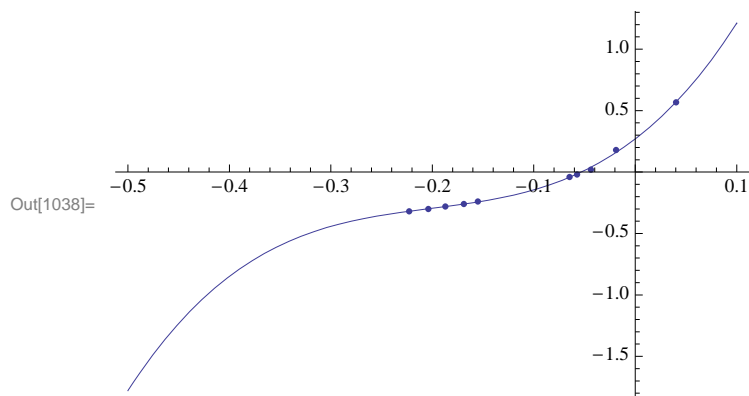
In[1036]:= **ListPlot**[tocke2]



In[1037]:= **fit2** = **FindFit**[tocke2, **d*x^3 + a*x^2 + b*x + c**, {**d, a, b, c**}, **x**]

Out[1037]= $\{d \rightarrow 43.7495, a \rightarrow 26.3678, b \rightarrow 6.34377, c \rightarrow 0.269413\}$

In[1038]:= **s2** = **Show**[**ListPlot**[tocke2], **Plot**[**d*x^3 + a*x^2 + b*x + c** /. **fit2**, {**x**, -0.5, 0.1}]]

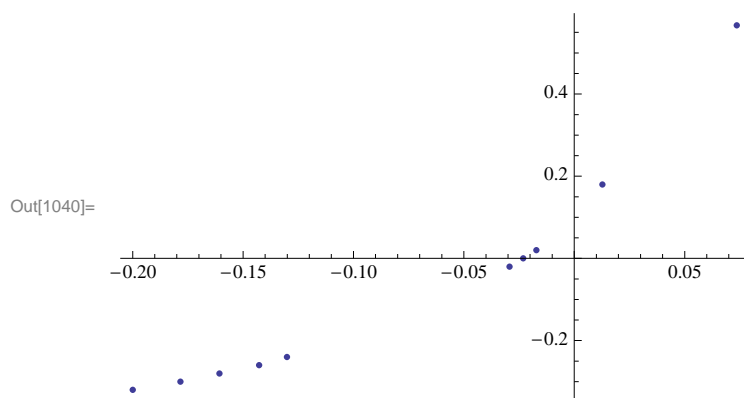


Tocka3 (x = -0.125)

```
In[1039]:= tocke3 = {{-0.199962,  $\frac{0.34}{0.5} - 1$ }, {-0.178369,  $\frac{0.35}{0.5} - 1$ }, {-0.160726,  $\frac{0.36}{0.5} - 1$ },
  {-0.142697,  $\frac{0.37}{0.5} - 1$ }, {-0.130138,  $\frac{0.38}{0.5} - 1$ }, {-0.02933,  $\frac{0.49}{0.5} - 1$ }, {-0.0231574,  $\frac{0.5}{0.5} - 1$ },
  {-0.0171627,  $\frac{0.51}{0.5} - 1$ }, {0.0127393,  $\frac{0.59}{0.5} - 1$ }, {0.0736125,  $\frac{0.59}{0.37645} - 1$ }}
```

```
Out[1039]:= {{-0.199962, -0.32}, {-0.178369, -0.3}, {-0.160726, -0.28},
  {-0.142697, -0.26}, {-0.130138, -0.24}, {-0.02933, -0.02}, {-0.0231574, 0.},
  {-0.0171627, 0.02}, {0.0127393, 0.18}, {0.0736125, 0.567273}}
```

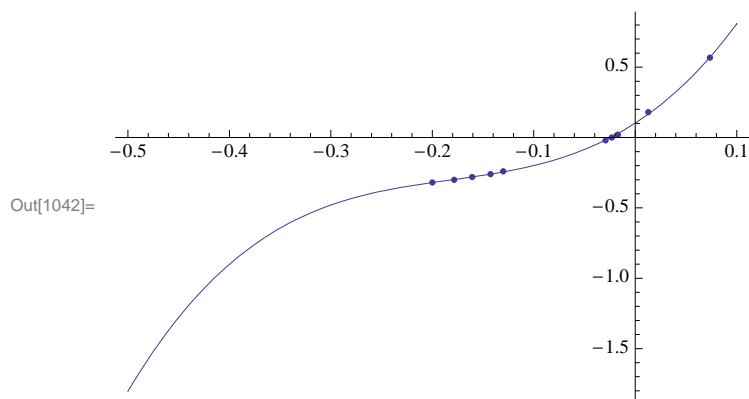
```
In[1040]:= ListPlot[tocke3]
```



```
In[1041]:= fit3 = FindFit[tocke3, d*x^3 + a*x^2 + b*x + c, {d, a, b, c}, x]
```

```
Out[1041]:= {d → 36.897, a → 20.1586, b → 4.66747, c → 0.102508}
```

```
In[1042]:= s3 = Show[ListPlot[tocke3],
  Plot[d*x^3 + a*x^2 + b*x + c /. fit3, {x, -0.5, 0.1}], PlotRange → All]
```



Tocka4 (x = -0.025)

In[1043]:= **tocke4 =**

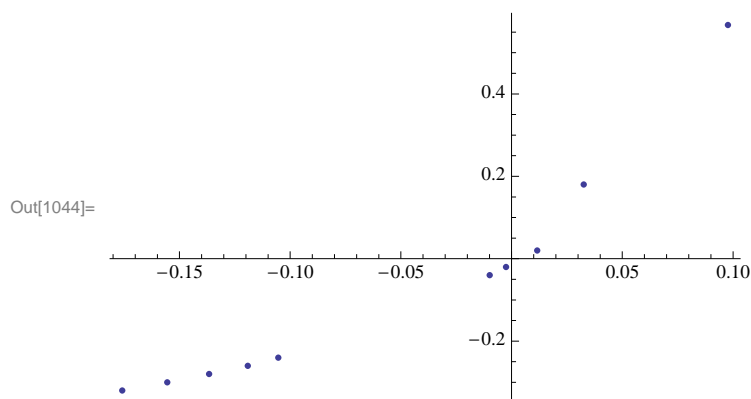
$$\left\{ \left\{ -0.175867, \frac{0.34}{0.5} - 1 \right\}, \left\{ -0.155509, \frac{0.35}{0.5} - 1 \right\}, \left\{ -0.1366, \frac{0.36}{0.5} - 1 \right\}, \left\{ -0.119141, \frac{0.37}{0.5} - 1 \right\}, \right.$$

$$\left. \left\{ -0.10541, \frac{0.38}{0.5} - 1 \right\}, \left\{ -0.00992469, \frac{0.48}{0.5} - 1 \right\}, \left\{ -0.00253436, \frac{0.49}{0.5} - 1 \right\}, \right.$$

$$\left. \left\{ 0.011572, \frac{0.51}{0.5} - 1 \right\}, \left\{ 0.0325455, \frac{0.59}{0.5} - 1 \right\}, \left\{ 0.0976977, \frac{0.59}{0.37645} - 1 \right\} \right\}$$

Out[1043]= $\{ \{-0.175867, -0.32\}, \{-0.155509, -0.3\}, \{-0.1366, -0.28\},$
 $\{-0.119141, -0.26\}, \{-0.10541, -0.24\}, \{-0.00992469, -0.04\},$
 $\{-0.00253436, -0.02\}, \{0.011572, 0.02\}, \{0.0325455, 0.18\}, \{0.0976977, 0.567273\} \}$

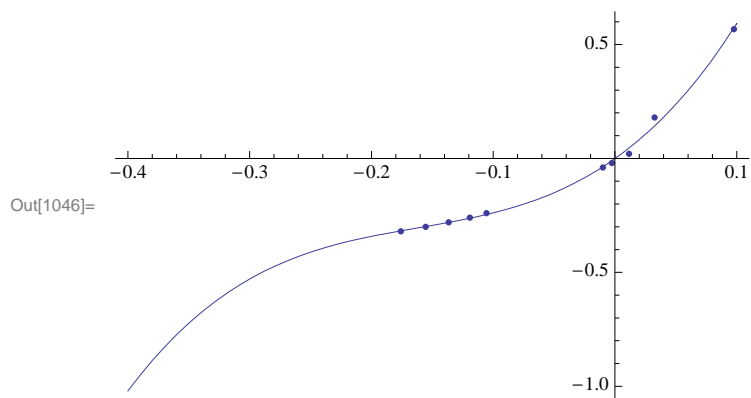
In[1044]:= **ListPlot[tocke4]**



In[1045]:= **fit4 = FindFit[tocke4, d*x^3 + a*x^2 + b*x + c, {d, a, b, c}, x]**

Out[1045]= $\{d \rightarrow 36.6171, a \rightarrow 17.7477, b \rightarrow 3.7894, c \rightarrow -0.00098811\}$

In[1046]:= **s4 = Show[ListPlot[tocke4], Plot[d*x^3 + a*x^2 + b*x + c /. fit4, {x, -0.4, 0.1}], PlotRange -> All]**

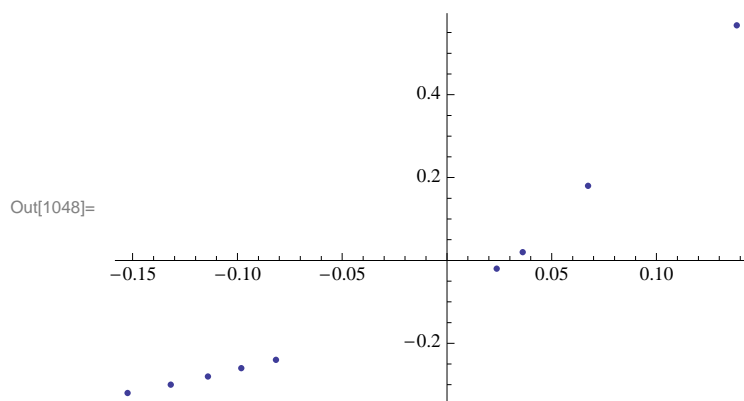


Tocka5 (x = 0.075)

```
In[1047]:= tocke5 = {{-0.152423,  $\frac{0.34}{0.5} - 1$ }, {-0.131847,  $\frac{0.35}{0.5} - 1$ }, {-0.114035,  $\frac{0.36}{0.5} - 1$ },
  {-0.0981261,  $\frac{0.37}{0.5} - 1$ }, {-0.0815955,  $\frac{0.38}{0.5} - 1$ }, {0.0237111,  $\frac{0.49}{0.5} - 1$ },
  {0.036113,  $\frac{0.51}{0.5} - 1$ }, {0.0673714,  $\frac{0.59}{0.5} - 1$ }, {0.138287,  $\frac{0.59}{0.37645} - 1$ }}
```

```
Out[1047]:= {{-0.152423, -0.32}, {-0.131847, -0.3}, {-0.114035, -0.28},
  {-0.0981261, -0.26}, {-0.0815955, -0.24}, {0.0237111, -0.02},
  {0.036113, 0.02}, {0.0673714, 0.18}, {0.138287, 0.567273}}
```

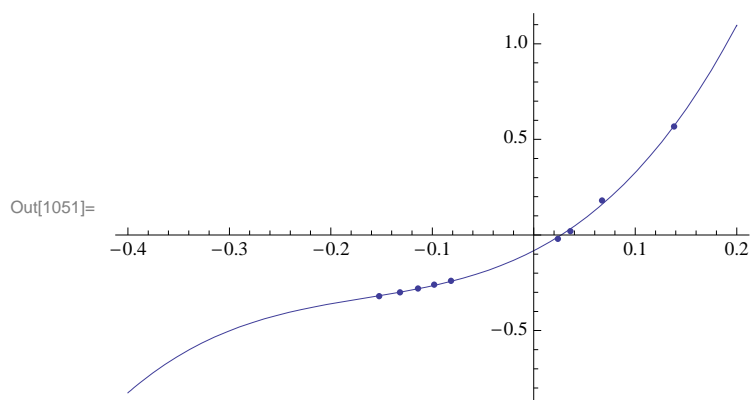
```
In[1048]:= ListPlot[tocke5]
```



```
In[1049]:= fit5 = FindFit[tocke5, d*x^3 + a*x^2 + b*x + c, {d, a, b, c}, x]
```

```
Out[1049]:= {d → 22.6914, a → 11.2636, b → 2.7327, c → -0.0824587}
```

```
In[1051]:= s5 = Show[ListPlot[tocke5],
  Plot[d*x^3 + a*x^2 + b*x + c /. fit5, {x, -0.4, 0.2}], PlotRange → All]
```

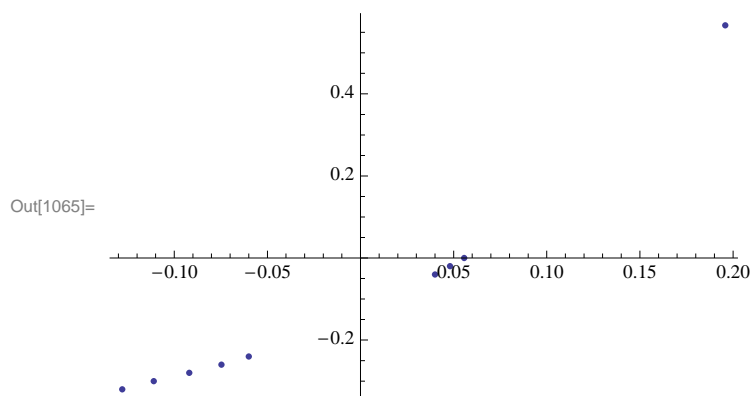


Tocka6 (x = 0.175)

```
In[1064]:= tocke6 = {{-0.127956,  $\frac{0.34}{0.5} - 1$ }, {-0.111014,  $\frac{0.35}{0.5} - 1$ }, {-0.0919486,  $\frac{0.36}{0.5} - 1$ },
  {-0.0746568,  $\frac{0.37}{0.5} - 1$ }, {-0.0599823,  $\frac{0.38}{0.5} - 1$ }, {0.0400255,  $\frac{0.48}{0.5} - 1$ },
  {0.0480319,  $\frac{0.49}{0.5} - 1$ }, {0.0556724,  $\frac{0.50}{0.5} - 1$ }, {0.195866,  $\frac{0.59}{0.37645} - 1$ }}
```

```
Out[1064]:= {{-0.127956, -0.32}, {-0.111014, -0.3}, {-0.0919486, -0.28},
  {-0.0746568, -0.26}, {-0.0599823, -0.24}, {0.0400255, -0.04},
  {0.0480319, -0.02}, {0.0556724, 0.}, {0.195866, 0.567273}}
```

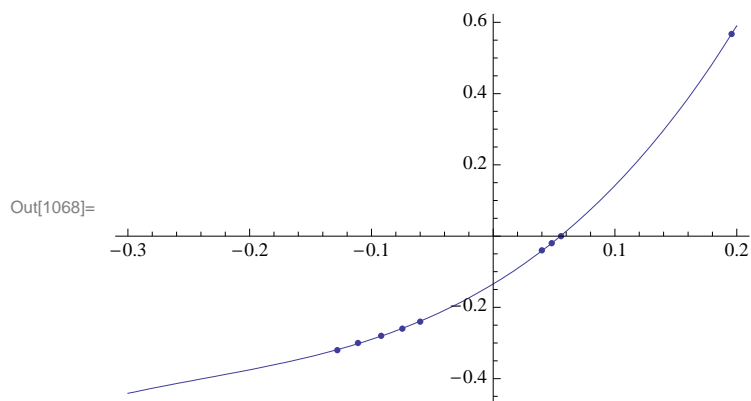
```
In[1065]:= ListPlot[tocke6]
```



```
In[1066]:= fit6 = FindFit[tocke6, d*x^3 + a*x^2 + b*x + c, {d, a, b, c}, x]
```

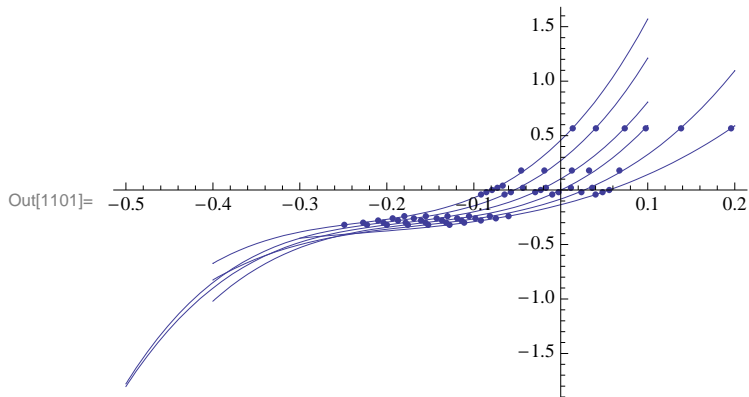
```
Out[1066]:= {d -> 8.47952, a -> 6.04614, b -> 2.07379, c -> -0.134584}
```

```
In[1068]:= s6 = Show[ListPlot[tocke6],
  Plot[d*x^3 + a*x^2 + b*x + c /. fit6, {x, -0.3, 0.2}], PlotRange -> All]
```



Final Results

In[1101]:= Show[s1, s2, s3, s4, s5, s6, PlotRange → All]

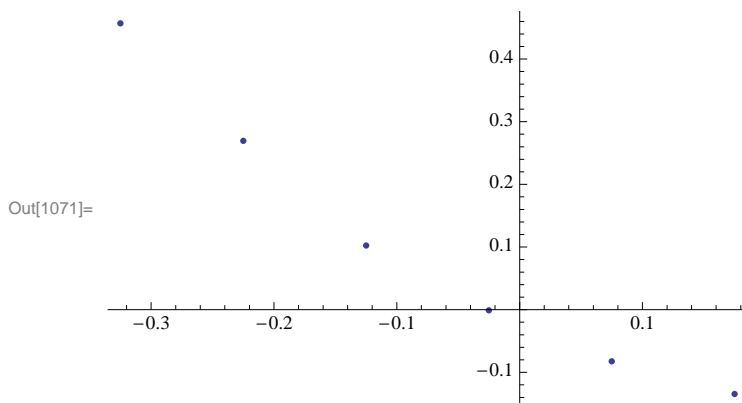


C - Dependence

In[1070]:= tockeC = {{-0.325, c /. fit1}, {-0.225, c /. fit2},
{-0.125, c /. fit3}, {-0.025, c /. fit4}, {0.075, c /. fit5}, {0.175, c /. fit6}}

Out[1070]= {{-0.325, 0.456968}, {-0.225, 0.269413}, {-0.125, 0.102508},
{-0.025, -0.00098811}, {0.075, -0.0824587}, {0.175, -0.134584}}

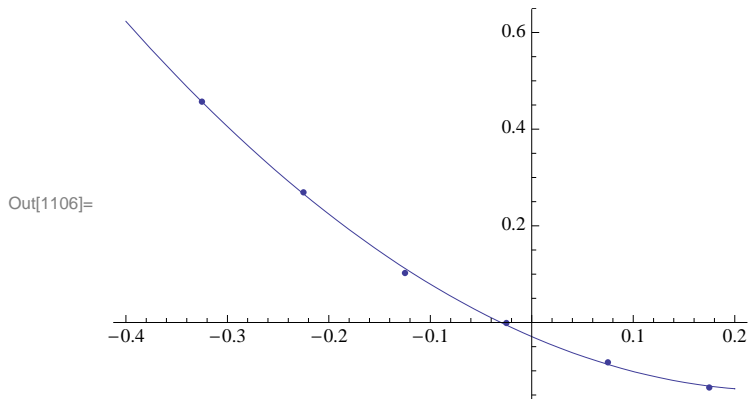
In[1071]:= ListPlot[tockeC]



In[1105]:= fitC = FindFit[tockeC, 0 * x³ + d * x² + f * x + g, {d, f, g, h}, x]

Out[1105]= {d → 1.81944, f → -0.903333, g → -0.0292416, h → 0.}

```
In[1106]:= Show[ListPlot[tockeC], Plot[h*x^3 + d*x^2 + f*x + g /. fitC, {x, -0.4, 0.2}]]
```

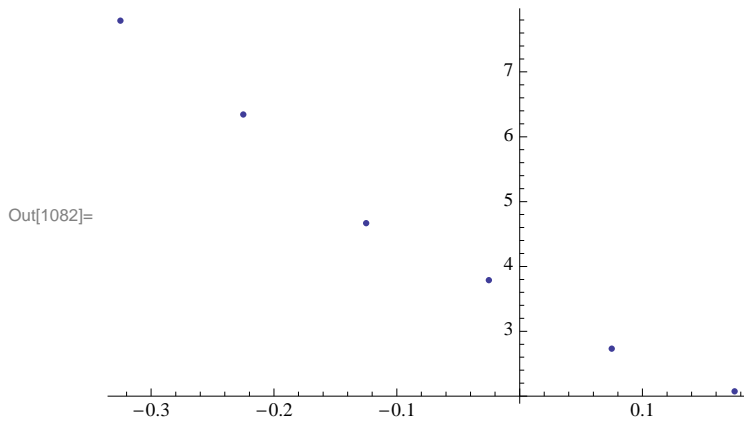


B - Dependence

```
In[1081]:= tockeB = {{-0.325, b /. fit1}, {-0.225, b /. fit2},
  {-0.125, b /. fit3}, {-0.025, b /. fit4}, {0.075, b /. fit5}, {0.175, b /. fit6}}
```

```
Out[1081]= {{-0.325, 7.78996}, {-0.225, 6.34377}, {-0.125, 4.66747},
  {-0.025, 3.7894}, {0.075, 2.7327}, {0.175, 2.07379}}
```

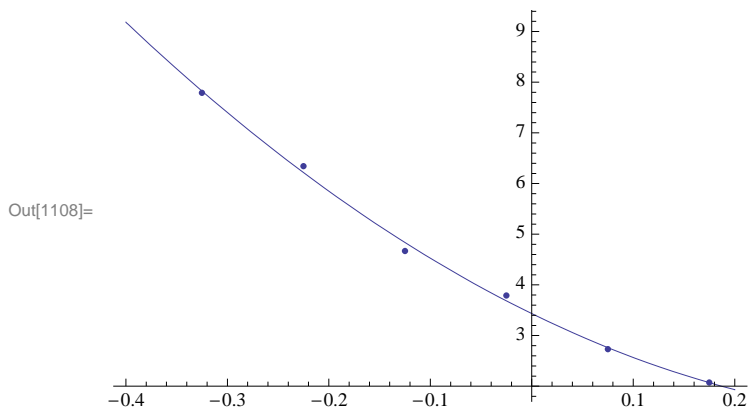
```
In[1082]:= ListPlot[tockeB]
```



```
In[1107]:= fitB = FindFit[tockeB, d*x^2 + f*x + g, {d, f, g}, x]
```

```
Out[1107]= {d -> 11.455, f -> -9.79378, g -> 3.43311}
```

```
In[1108]:= Show[ListPlot[tockeB], Plot[d*x^2 + f*x + g /. fitB, {x, -0.4, 0.2}]]
```

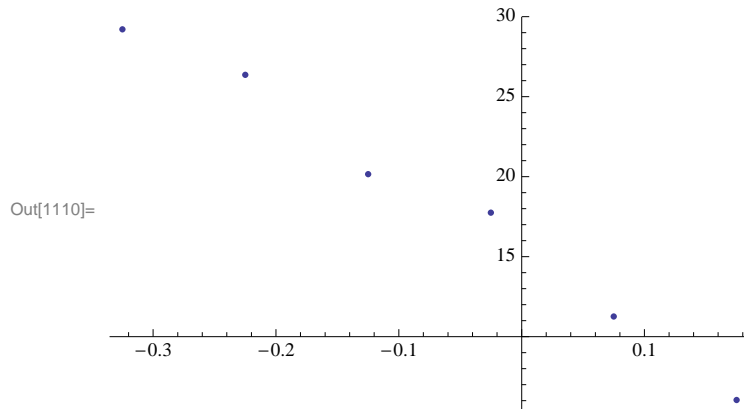


A - Dependence

```
In[1109]:= tockeA = {{-0.325, a /. fit1}, {-0.225, a /. fit2},
  {-0.125, a /. fit3}, {-0.025, a /. fit4}, {0.075, a /. fit5}, {0.175, a /. fit6}}
```

```
Out[1109]= {{-0.325, 29.2089}, {-0.225, 26.3678}, {-0.125, 20.1586},
  {-0.025, 17.7477}, {0.075, 11.2636}, {0.175, 6.04614}}
```

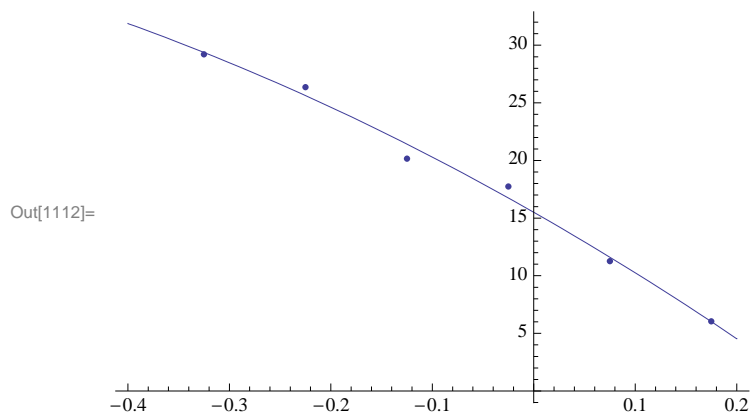
```
In[1110]:= ListPlot[tockeA]
```



```
In[1111]:= fitA = FindFit[tockeA, d*x^2 + f*x + g, {d, f, g}, x]
```

```
Out[1111]= {d → -23.1811, f → -50.2021, g → 15.5068}
```

```
In[1112]:= Show[ListPlot[tockeA], Plot[d*x^2 + f*x + g /. fitA, {x, -0.4, 0.2}]]
```



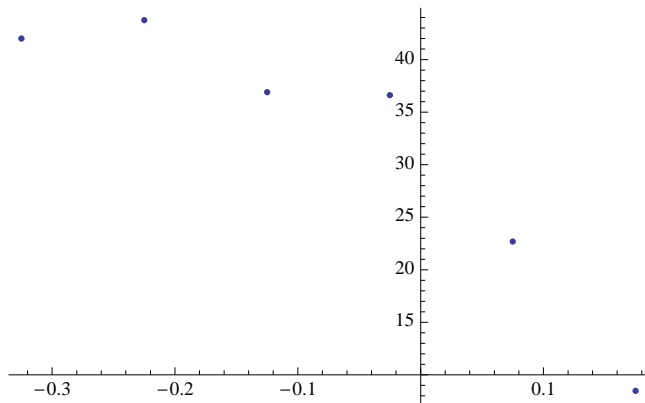
D - Dependence

```
In[1113]:= tockeD = {{-0.325, d /. fit1}, {-0.225, d /. fit2},
  {-0.125, d /. fit3}, {-0.025, d /. fit4}, {0.075, d /. fit5}, {0.175, d /. fit6}}
```

```
Out[1113]= {{-0.325, 42.0075}, {-0.225, 43.7495}, {-0.125, 36.897},
  {-0.025, 36.6171}, {0.075, 22.6914}, {0.175, 8.47952}}
```

In[1114]:= ListPlot[tockeD]

Out[1114]=



In[1115]:= fitD = FindFit[tockeD, 0 * x² + f * x + g, {d, f, g}, x]

Out[1115]= {d → -6.95758×10^{-15} , f → -66.0269, g → 26.7883}

In[1116]:= Show[ListPlot[tockeD], Plot[d * x² + f * x + g /. fitD, {x, -0.4, 0.2}]]

Out[1116]=

