Decomposition of N2O5

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This is a Matlab script to analyze N2O5 decomposition data.

The times at which concentration data was taken are

```
times = [0,600,1200,1800,2400,3000,3600,4200,4800,6000];
```

The concentration data (moles per liter) is

```
data = [0.31,0.254,0.208,0.172,0.141,0.116,0.0964,0.0812,0.0669,0.0464];
```

Compute the number of data points

```
N = length(data);
```

Here is a plot of the raw data

```
figure(1)
plot(times, data,'.r','MarkerSize',20);
xlabel("Time (seconds)");
ylabel("Concentration (moles/liter)");
```

Doesn't look 0th order. Is it first order? Try a logarithmic transformation of the data, as was done for H2O2 or butadiene; see those worksheets.