

1a)

```
CommandWindow  
clearvars  
clc
```

```
format short g
```

```
syms t kp td tp
```

```
v = kp * (1 - exp(-(t - td) / tp))
```

```
mdata = xlsread('odesbesdata', 'data1');
```

```
t1 = mdata(:, 1);
```

```
v = mdata(:, 2);
```

```
v1 = round(mdata(900, 2), 1)
```

```
to = zeros(length(v), 1)
```

```
t = [to t1]
```

```
% [mboeff, mcoefficient, mresid, mresidint, manora]  
z = regress(v, t),
```

```
% mcoeff
```

```
% rsquared value = mcoeff(1)
```

```
% plot(t, v)
```

```
% grid on
```