

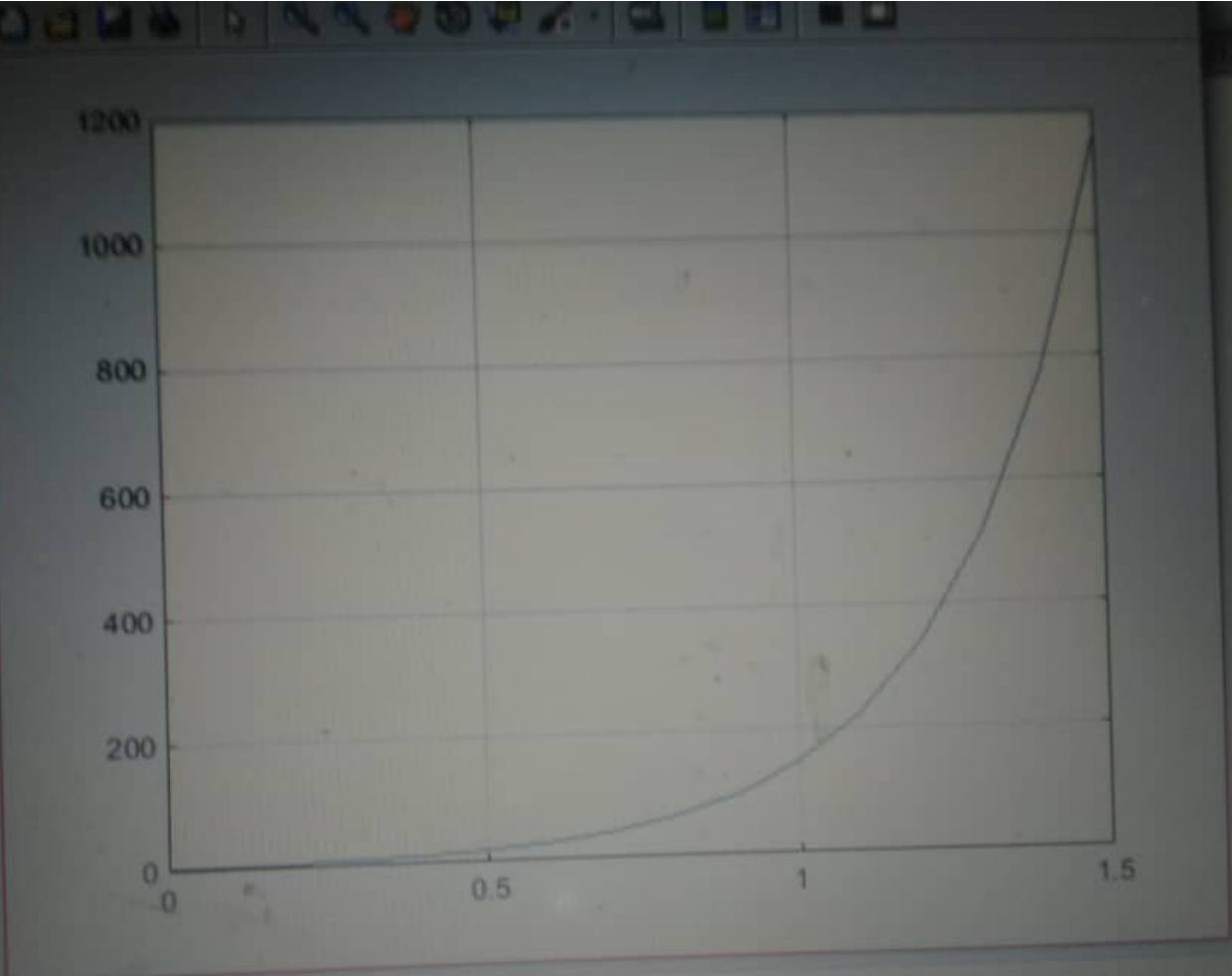
Editor - C:\Users\Alegrs\Documents\Documents\ Matlab 2014b\Serial\bin\pit.m

```
1 -- commandwindow
2 -- clc
3 -- close all
4 -- syms n(t)
5 -- D=diff(n)
6 -- ode=(diff(n,t,2))-(diff(n,t))-(12*n)==144*t^3+12.5;
7 -- cond1=D(0)==-0.5;
8 -- cond2=n(0)==5;
9 -- conds=[cond1 cond2];
10 -- dsol(t)=dsolve(ode,conds);
11 -- dsol=simplify(dsol(t))
12 -- tn=[0:0.1:1.5]
13 -- femmy=subs(dsol,tn)
14 -- plot(tn,femmy)
15 -- grid on
16
```

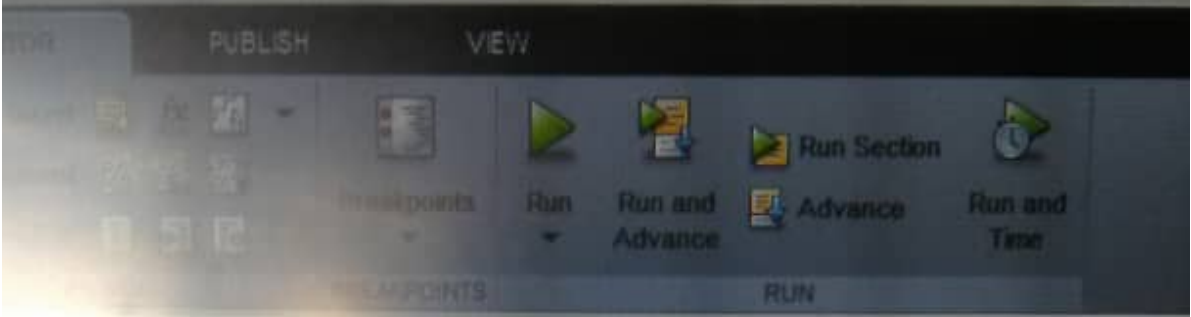
Command Window

I

```
ndow  
  
(n, t, 2) - (dif  
) == -0.5;  
) == 5;  
nd1 cond2];  
solve(ode, con  
lify(dsol(t))  
: 1.5]  
as(dsol, tn)  
emy)
```



$$y(1.5) = 319/250, 3 \cdot \exp(6/5) + 2 \cdot \exp(-9/10) - 5$$

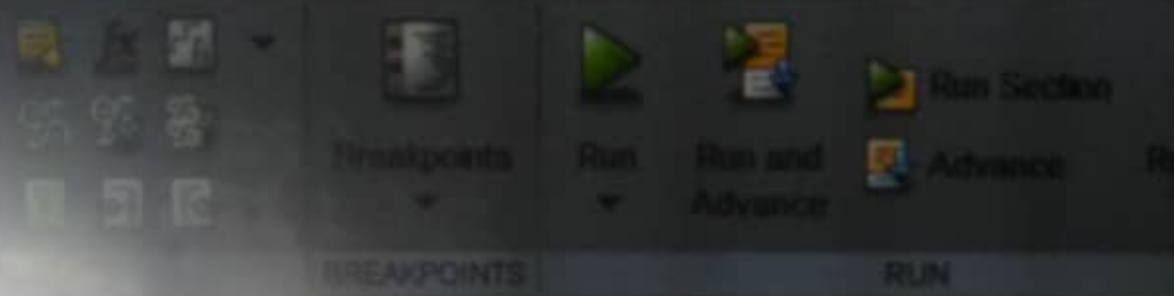


```
Editor - C:\Users\user\Desktop\Serial\bin\burstttt3.m
eng38122.m x ENG381A3.m x laplace.m x matlablapla.m x
1 - commandwindow
2 - clear
3 - clc
4 - syms f(s) s
5 - u = (3.142)/((s^2) + 15*3.142*s + 24*(3.142^3))
6 - ilaplace(u)
```

Command Window

```
z =
1871/1800*(s^2 + (9713*s)/100 - 6546144746619749/8796093021)

ans =
(11343*s^2 + 4312*s + 103978021711240) / (1201*s^2 + 18713142*s + 18713142)
```



bin

Editor - C:\Users\user\Desktop\Serial\bin\burstttt2t.m

eng38122.m x ENG381A3.m x laplace.m x matla

```
1 - commandwindow
2 - clear
3 - clc
4 - syms k w t s f(t) f(s) a
5 - z = k*exp(-a*t)*sin(5*w*t)*cos(3*w*t)
6 - laplace(z)
```

Command Window

```
z =
15717180014s^2 + 147137s + 1490 + 1345164746812767
```

```
ans =
```