Журнал команд

```
A=[10 20 30; 40 50 60; 70 80 90];
B=[1; 2; 3]
B=[1; 2; 3];
inv(A)*B
C=rref([A B]);
[n,m]=size(C);
ovt=C(n,:)
// -- 08/12/2022 00:04:30 -- //
a=3;b=7;
x=a:b;y=x**3-5*sqrt(8);
inttrap(y)
a=11;b=22;
x=a:b;y=sqrt(x)/1423^**0.3;
x=a:b;y=sqrt(x)/1423**0.3;
inttrap(y)
a=%pi;b=%4*p;
a=%pi;b=%p*4;
a=%pi;b=%pi*4;
x=a:b;y=x**3/1.5;
inttrap(y)
integrate('x-2**10','x',-3,3)
integrate('sqrt(x)*x**2/100','x',0,10)
integrate(
integrate('x**2','x',-2,2)
deff('y=f(x)','y=0.00001*x'); intg(-100,100,f)
deff('y=g(x)','y=x/sqrt(2)'); intg(-3,3,g)
deff('y=j(x)','y=x+%pi/2'); intg(-10,10,j)
h=5; x= 10:5:50;
y=x**2
d=diff(y)
d2=diff(y,2)
d3=diff(y,3)
g=(d(1)-d2(1)/2+d3(1)/3)/h
h=10;x=1:1:10;
y=log2(x**2)
d=diff(y)
d2=diff(y,1)
d2=diff(y,2)
d3=diff(y,3)
g=(d(1)-d2(1)/2+d3(1)/3)/h
h=1;x=0:1:10;
y=x**3+144
d=diff(y)
d2=diff(y,2)
d3=diff(y,3)
g=(d(1)-d2(1)/2+d3(1)/3)/h
function y=f(x), y = 150-x**2, endfuction;
numderivative(f,2)
numderivative(f,3)
function y = f(x), y= 15*x-50, endfunction;
numderivative(f,2)
function y = f(x), y= 15*x-50, endfunction;
function y = s(x), y= 15*x-50, endfunction;
numderivative (s,2)
```

```
--> a=3;b=7;

--> x=a:b;y=x**3-5*sqrt(8);

--> inttrap(y)
 ans  =

   533.43146


--> a=11;b=22;

--> x=a:b;y=sqrt(x)/1423^**0.3;
x=a:b;y=sqrt(x)/1423^**0.3;
                    ^~^
Ошибка: syntax error, unexpected ** or ^

--> x=a:b;y=sqrt(x)/1423**0.3;

--> inttrap(y)
 ans  =

   5.0359108


--> a=%pi;b=%4*p;

Неопределённая переменная: %4

--> a=%pi;b=%p*4;

Неопределённая переменная: %p

--> a=%pi;b=%pi*4;

--> x=a:b;y=x**3/1.5;
```

```
--> inttrap(y)
 ans  =

   3628.7144


--> integrate('x-2**10','x',-3,3)
 ans  =

  -6144.


--> integrate('sqrt(x)*x**2/100','x',0,10)
 ans  =

   9.035079


--> integrate(
integrate(
         ^^
Ошибка: syntax error, unexpected end of file

--> integrate('x**2','x',-2,2)
 ans  =

   5.3333333


--> deff('y=f(x)','y=0.00001*x'); intg(-100,100,f)
 ans  =

   0.


--> deff('y=g(x)','y=x/sqrt(2)'); intg(-3,3,g)
 ans  =

   0.
```

```
--> deff('y=j(x)','y=x+%pi/2'); intg(-10,10,j)
 ans  =

   31.415927


--> h=5; x= 10:5:50;

--> y=x**2
 y  =


         column 1 to 4

   100.   225.   400.   625.

         column 5 to 8

   900.   1225.   1600.   2025.

         column 9

   2500.


--> d=diff(y)
 d  =


         column 1 to 4

   125.   175.   225.   275.

         column 5 to 8

   325.   375.   425.   475.
```

```
--> d2=diff(y,2)
 d2  =


         column 1 to 5

   50.   50.   50.   50.   50.

         column 6 to 7

   50.   50.


--> d3=diff(y,3)
 d3  =

   0.   0.   0.   0.   0.   0.


--> g=(d(1)-d2(1)/2+d3(1)/3)/h
 g  =

   20.


--> h=10;x=1:1:10;

--> y=log2(x**2)
 y  =


         column 1 to 4

   0.   2.   3.169925   4.

         column 5 to 6

   4.6438562   5.169925

         column 7 to 9
```

```
   5.6147098    6.    6.33985

          column 10

   6.6438562


--> d=diff(y)
 d  =


          column 1 to 3

   2.    1.169925    0.830075

          column 4 to 5

   0.6438562    0.5260688

          column 6 to 8

   0.4447848    0.3852902    0.33985

          column 9

   0.3040062


--> d2=diff(y,1)
 d2  =


          column 1 to 3

   2.    1.169925    0.830075

          column 4 to 5

   0.6438562    0.5260688
```

```
         column 6 to 8

   0.4447848   0.3852902   0.33985

         column 9

   0.3040062


--> d2=diff(y,2)
 d2  =


         column 1 to 3

  -0.830075  -0.33985  -0.1862188

         column 4 to 5

  -0.1177874  -0.081284

         column 6 to 7

  -0.0594947  -0.0454402

         column 8

  -0.0358438


--> d3=diff(y,3)
 d3  =


         column 1 to 2

   0.490225   0.1536312

         column 3 to 4
```

```
   0.0684314   0.0365034

         column 5 to 6

   0.0217893   0.0140545

         column 7

   0.0095963


--> g=(d(1)-d2(1)/2+d3(1)/3)/h
 g  =

   0.2578446


--> h=1;x=0:1:10;

--> y=x**3+144
 y  =


         column 1 to 4

   144.    145.    152.    171.

         column 5 to 8

   208.    269.    360.    487.

         column 9 to 11

   656.    873.    1144.
```

```
--> d=diff(y)
 d  =


         column 1 to 6

   1.    7.    19.    37.    61.    91.

         column 7 to 10

   127.    169.    217.    271.


--> d2=diff(y,2)
 d2  =


         column 1 to 5

   6.    12.    18.    24.    30.

         column 6 to 9

   36.    42.    48.    54.


--> d3=diff(y,3)
 d3  =


         column 1 to 6

   6.    6.    6.    6.    6.    6.

         column 7 to 8

   6.    6.
```

```
--> g=(d(1)-d2(1)/2+d3(1)/3)/h
 g  =

   0.


--> function y=f(x), y = 150-x**2, endfuction;
  > numderivative(f,2)
  > numderivative(f,3)
  >
  > function y = f(x), y= 15*x-50, endfunction;
  > numderivative(f,2)
  > function y = f(x), y= 15*x-50, endfunction;
  > function y = s(x), y= 15*x-50, endfunction;
  > numderivative (s,2)
```