

1

`x=8.25;y=1.8;`
`y^3+x`

`ans =`

`14.0820`

`(5*y)^(x-2*y)`

`ans =`

`2.7367e+04`

`e^(4*x*y)`

`exp(4*x*y)`

`ans =`

`6.2675e+25`

`log(y^x-x)`

`ans =`

`4.7824`

2

`fplot('5*sin(x)',[-pi,pi])`

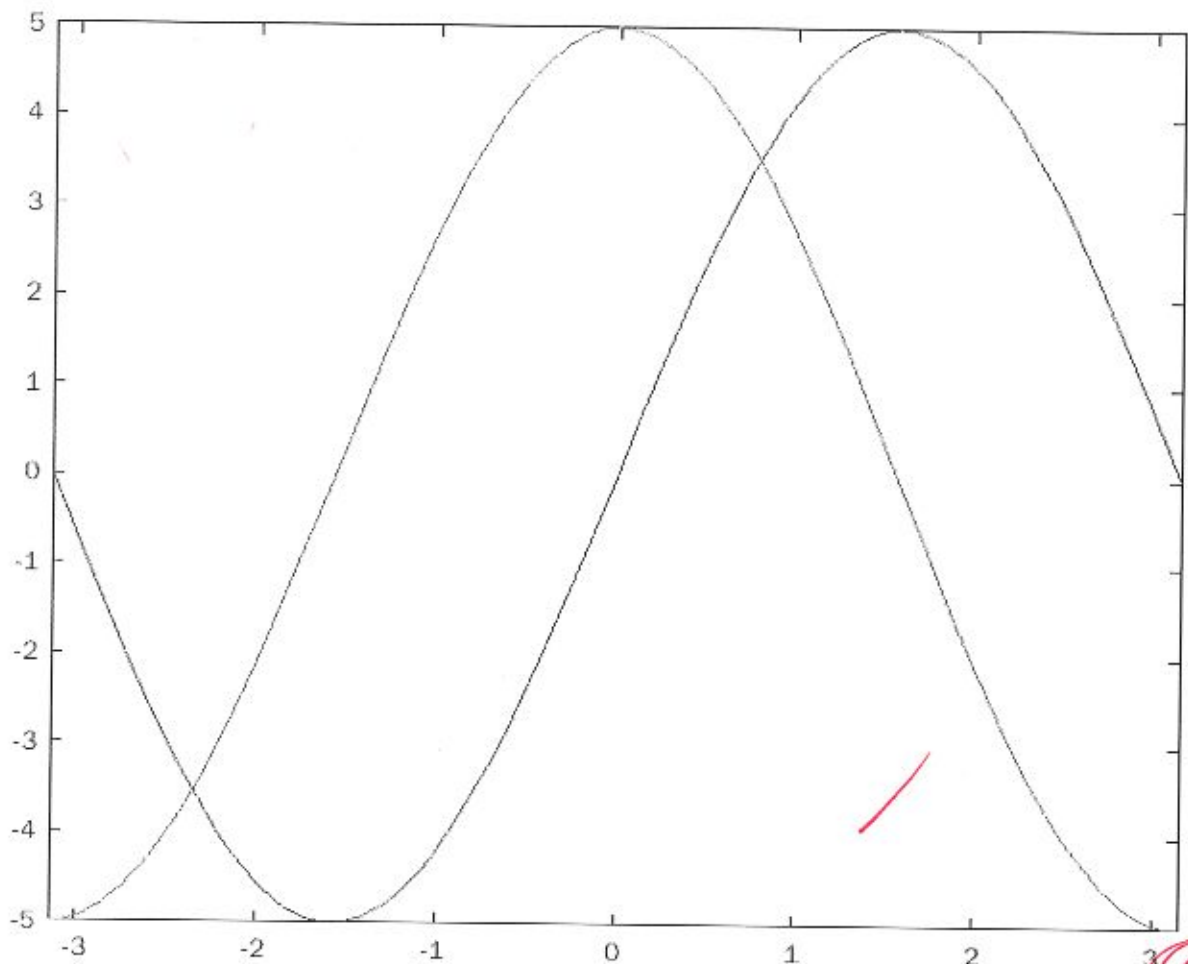
`hold`

`Current plot held`

`fplot('5*cos(x)',[-pi,pi])`

69%

10/10



$\frac{15}{15}$

3

`solve(5*x^3==(2*x^2)-(3*x)+3)`

`ans =`

`root(z^3 - (2*z^2)/5 + (3*z)/5 - 3/5, z, 1)`

`root(z^3 - (2*z^2)/5 + (3*z)/5 - 3/5, z, 2)`

`root(z^3 - (2*z^2)/5 + (3*z)/5 - 3/5, z, 3)`

2

$\frac{2}{15}$

```
4
X= [3 4;-1 0]
```

```
X =
```

```
    3    4
   -1    0
```

2

$\frac{2}{20}$

```
5
clear all
syms x y
y=5*exp(x)*sin(x), y1=diff(y), y2=diff(y,2), y4=diff(y,4)
```

```
y =
```

```
5*exp(x)*sin(x)
```

```
y1 =
```

```
5*exp(x)*cos(x) + 5*exp(x)*sin(x)
```

```
y2 =
```

```
10*exp(x)*cos(x)
```

```
y4 =
```

$-20 \cdot \exp(x) \cdot \sin(x)$

$y^4 + y^2 + 3y^2$

ans =

$100 \cdot \exp(2x) \cdot \cos(x)^2 + 475 \cdot \exp(2x) \cdot \sin(x)^2$

simplify(ans)

ans =

$25 \cdot \exp(2x) \cdot (15 \sin(x)^2 + 4)$



A handwritten red circle containing the fraction $\frac{25}{25}$, which simplifies to 1.

6

$t = [22.8 \ 22.6 \ 22.4 \ 25.1 \ 21.6 \ 24.6 \ 21.7 \ 21.9 \ 21.7 \ 22.8 \ 23.2 \ 21.9 \ 24.8 \ 22.2 \ 22.0];$

$\bar{x} = \text{mean}(t), m = \text{median}(t), s = \text{std}(t, 1)$

$\bar{x} =$

22.7533

$m =$

22.4000

$s =$

1.1354



A handwritten red circle containing the fraction $\frac{15}{15}$, which simplifies to 1.