

1.

A) $x=8.25; y=1.8;$ y^{3+x}

ans =

14.0820

B) $(5*y)^{(x-2*y)}$

ans =

2.7367e+04

C) $\exp(4*x*y)$

ans =

6.2675e+25

d) $\log((y^x)-x)$

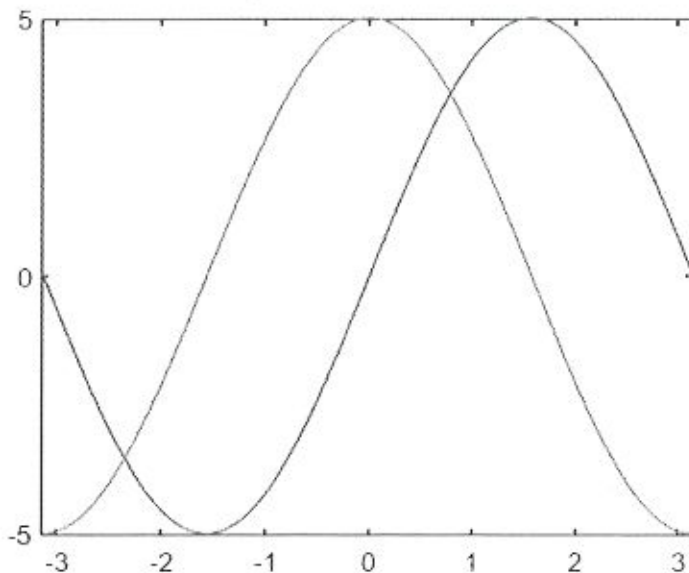
ans =

4.7824

2.

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

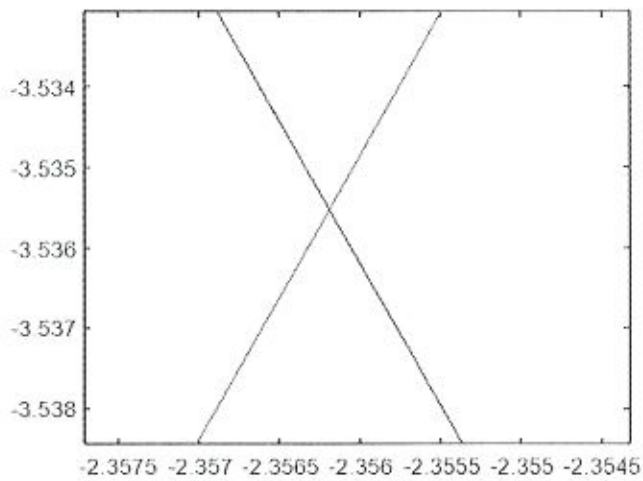
Current plot held

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

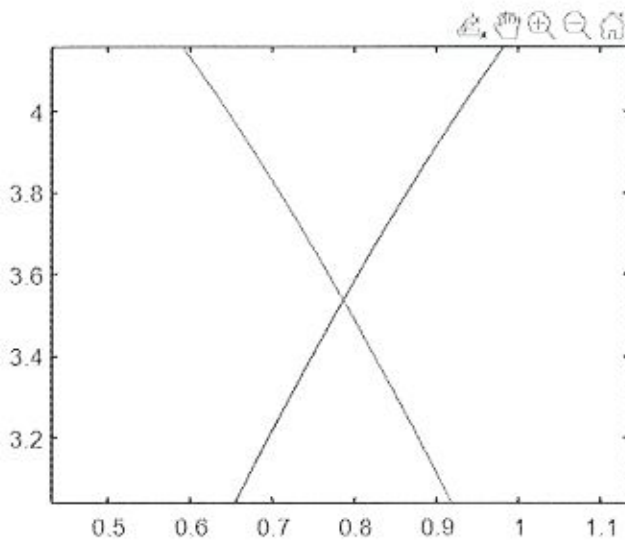
50%

10/10

15/15



Intersection (-2.356),(-3.536)



Intersection (0.8),(3.6)

3.

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

ans =

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

4.

5.

`clear all`

`syms x`

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

`y =`

$\frac{4}{15}$

$$5 \cdot \exp(x) \cdot \sin(x)$$

$$y1 =$$

$$5 \cdot \exp(x) \cdot \cos(x) + 5 \cdot \exp(x) \cdot \sin(x)$$

$$y2 =$$

$$10 \cdot \exp(x) \cdot \cos(x)$$

$$y4 =$$

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

$$6. \ t = [49 \ 56 \ 82 \ 35 \ 42 \ 65 \ 72 \ 52];$$

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

$$xbar =$$

$$56.6250$$

$$m =$$

$$54$$

$$s =$$

$$14.6282$$

$$\frac{15}{25}$$

$$\frac{6}{15}$$