

1)

```
>> x=8.25;y=1.8; ✓  
>> y^3+x  
  
ans =  
  
14.0820 ✓  
  
>> (5*y)^(x-2*y)  
  
ans =  
  
2.7367e+04 ✓  
  
>> exp(4*x*y)  
  
ans =  
  
6.2675e+25 ✓  
  
>> ln(y^x-x)  
Unrecognized function or variable 'ln'.  
  
>> log(y^x-x)  
  
ans =  
  
4.7824 ✓
```

64%

10/10

2)

```

tplot('5sin(x)',[-pi,pi])
tplot('5sin(x)',[-pi,pi])

```

valid expression. When calling a function or indexing a variable, use parentheses. Otherwise, check for mismatched delimiters.

you mean:

```

tplot('5sin(x)',[-pi,pi])

```

or using `tplot>sin2fn`

valid expression. Check for missing multiplication operator, missing or unbalanced delimiters, or other syntax error. To construct matrices, use brackets instead of parent

or in `tplot (line 182)`

```

fn(1) = str2fn(fn(1));

```

```

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

```

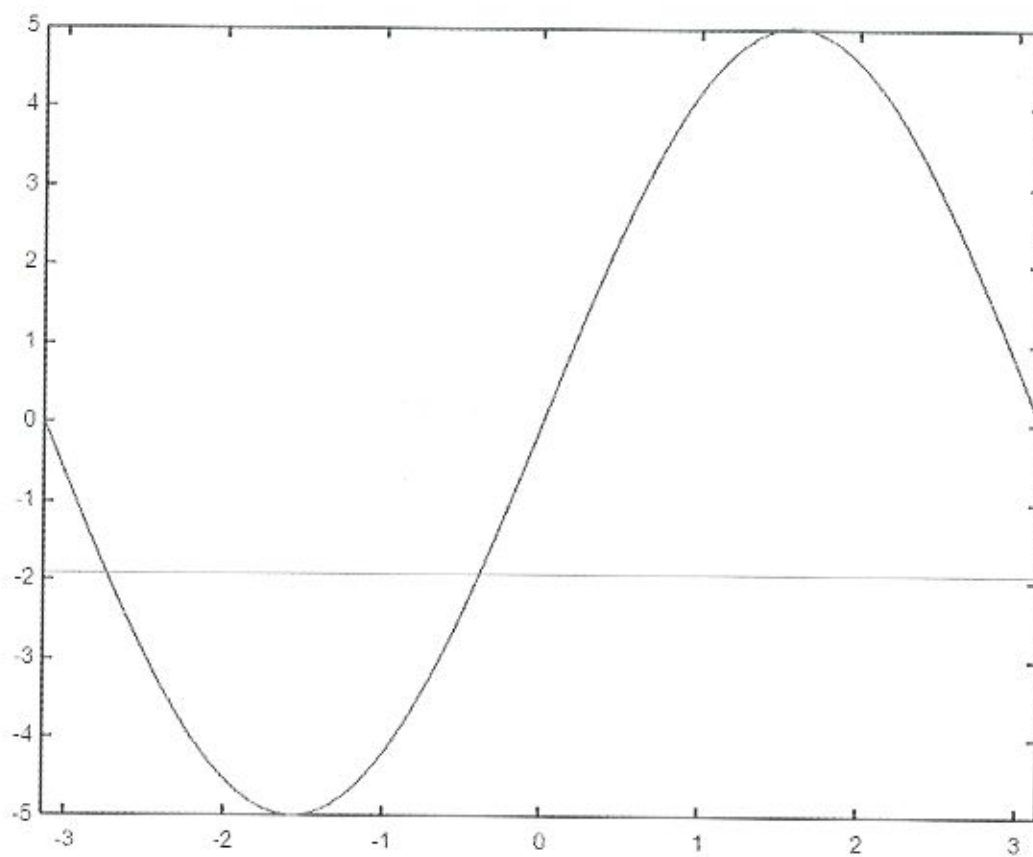
Msg: tplot will not accept character vector or string inputs in a future release. Use `tplot(@(x)5.*sin(x))` instead.

```

tplot (line 119):
hold
cont, plot, hold
tplot(5*cos(x)',[-pi,pi])

```

Handwritten red annotations: A large red '5' is written above the first line of code. Two red '2's are written to the right of the code block. A red circle is drawn around the '5' in the last line of code.



10/15

3)

```
>> clear all  
>> syms x  
>> format short  
>> solve(2*x^2-3*x+3)
```

ans =

```
3/4 - (15^(1/2)*1i)/4  
(15^(1/2)*1i)/4 + 3/4
```

0?
X

$\frac{4}{15}$

5)

```
>> clear all
>> syms x y

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

y =

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

y1 =

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

y2 =

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

y4 =

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

```
>> y4^2+y2^2+3*y^2
```

ans =

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

```
>> simplify(ans)
```

ans =

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



6)

```
clear all  
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]
```

```
22.8000 22.6000 22.4000 25.1000 21.6000 24.6000 21.7000 21.9000 21.7000 22.8000 23.2000 21.9000 24.8000 22.2000 22.0000
```

```
>> xbar=mean(t),m=median(t),s=std(t,1)
```

```
xbar =
```

```
22.7533
```

```
m =
```

```
22.4000
```

```
s =
```

```
1.1354
```



