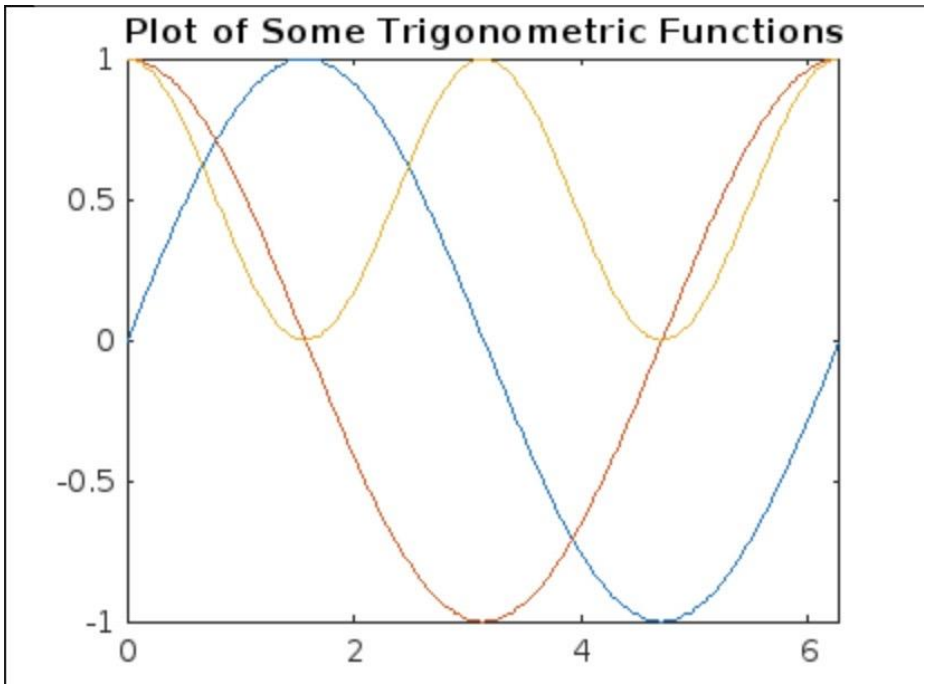
In class Problem 1:

```
t=0:pi/100:2*pi; %any comment
y=sin(t);
z=cos(t);
x=(cos(t)).^2;
plot(t,y,t,z,t,x)
title('Plot of Some Trigonometric Functions')
```

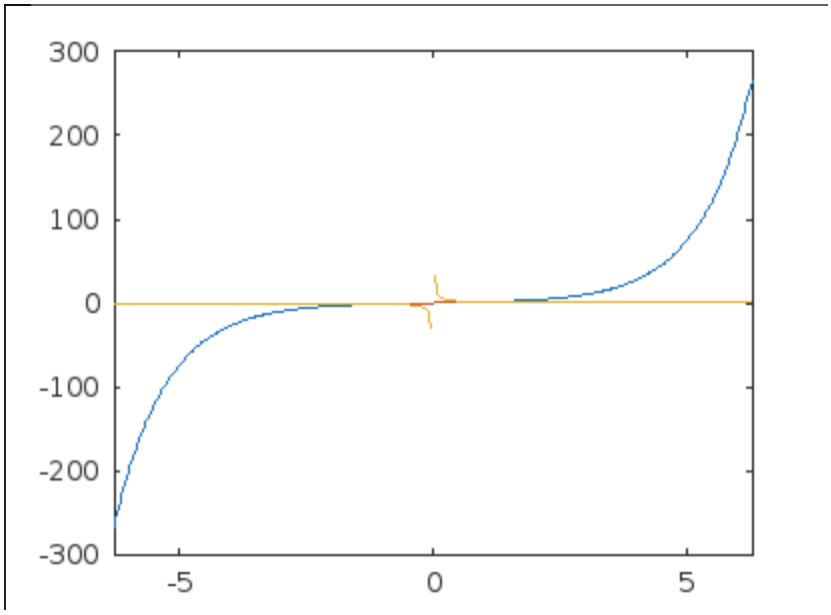
Solution:



In-Class Problem 2:

```
t=-1*2*pi:pi/100:2*pi
x=sinh(t)
y=tanh(t)
z=coth(t);
plot(t,x,t,y,t,z)
```

Solution:



HW Problem1:

```
A = [1 1 1; 1 -1 1; 1 2 -1];
B = [6; 2; 2];
X = inv(A) * B
```

Solution:

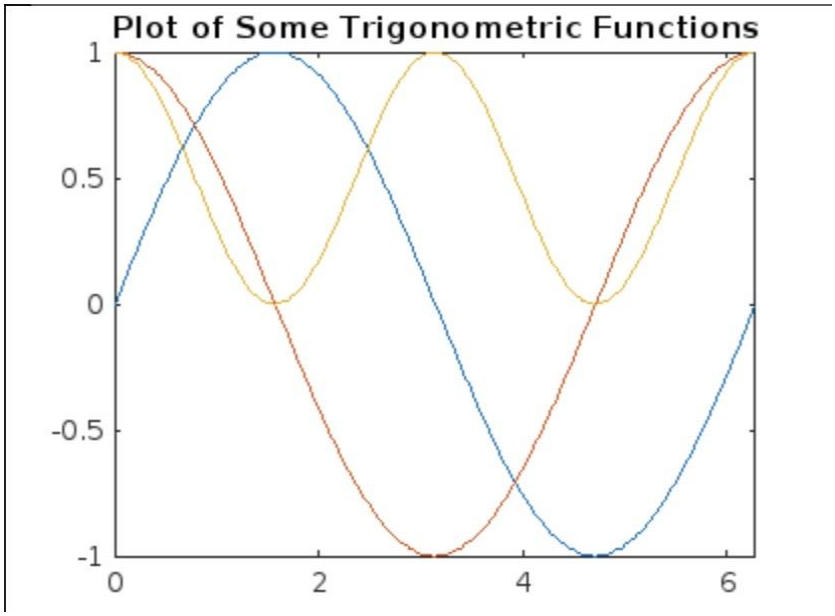
```
X =

1
2
3
```

HW Problem 2:

```
t = 0:pi/100:2*pi;
y=sin(t);
z=cos(t);
x=(cos(t)).^2;
plot(t,y,t,z,t,x)
```

Solution:



HW Problem 3A:

```
z=polyval([1 3 -100 54.286 1 3 6],6)
```

Solution:

```
z =


-4.7830e+04
```

HW Problem 3B:

```
roots([1 3 -100 54.286 1 3 6])
```

Solution:

```
ans =

-11.8359 + 0.0000i
8.2813 + 0.0000i
0.7639 + 0.0000i
-0.3783 + 0.0000i
0.0845 + 0.4524i
0.0845 - 0.4524i
```