Problem #1.33

- - - -(insert your m-file (code) here)

```
3*3
3+3+3
2*2*3-3
3^2
2+2+2+3
2*3+3
sqrt(3*3*3*3)
3*3*3/3
(3+3)*2-3
(3/3)*3^2
```

Output :

------insert output from your program(your results) here

ans =

9

ans =

9

ans =

9

ans =

9

ans =

9

ans =

9

ans =

9

ans =

9

ans =

9

ans =

9

Problem #1.34

- - - -(insert your m-file (code) here)

```
r=6
theta=5
x = r * cos(theta)
y = r * sin(theta)
```

Output :

------insert output from your program(your results) here

r =

6

theta =

5

x =

1.7020

y =

-5.7535

Problem #1.35

- - - -(insert your m-file (code) here)

```
c=3*10^8
v=900
lorenz=(1)/(sqrt(1-((v^2)/(c^2))))
```

Output :

------insert output from your program(your results) here

```
c =

  300000000


v =

  900


lorenz =

   1.0000
```

Problem #1.37

- - - -(insert your m-file (code) here)

```
A=20
C=80
X=5

C=(A/X)*(sqrt((2)/(pi*exp(1))))
```

2nd try with different X value:

```
A=20
C=80
X=50

C=(A/X)*(sqrt((2)/(pi*exp(1))))
```

Output :

------insert output from your program(your results) here

A =

20

C =

80

X =

5

C =

1.9358

2nd results:

A =

20

C =

80

X =

50

C =

0.1936

Problem #2.45

- - - -(insert your m-file (code) here)

```
A=[1 4; 3 2]
B=[2 1 3; 1 5 6; 3 6 0]
C=[3 2 5; 4 1 2]

3*A
A*C
%cannot multiply anything times B because there are more than 2 rows
```

Output :

------insert output from your program(your results) here

```
A =

   1   4
   3   2


B =

   2   1   3
   1   5   6
   3   6   0


C =

   3   2   5
   4   1   2


ans =

   3  12
   9   6


ans =

  19   6  13
  17   8  19
```

Problem #2.15

- - - -(insert your m-file (code) here)

```
mat=[1 2 3 4; 5 6 7 8]
mat(:,3)=[1,2]
%this changes the third column from 3 and 7 to 1 and 2.
```

Output :

------insert output from your program(your results) here

```
mat =

    1    2    3    4
    5    6    7    8


mat =

    1    2    1    4
    5    6    2    8
```