Sclafani-Lab-01

 $u = [1 \ 2 \ 2]$

 $u = 1 \times 3$

1 2 2

 $v = [1 \ 2 \ 5]$

 $v = 1 \times 3$

1 2 5

3*u-v

ans = 1×3

2 4 1

theta=acos((dot(u,v))/(norm(u)*norm(v)))

theta = 0.4205

A=[1 2 3 ; 4 5 6 ; 7 8 9]

 $A = 3 \times 3$

1 2 3 4 5 6

4 5 6 7 8 9

B=[7 8 9 ; 6 5 4 ; 3 2 1]

 $B = 3 \times 3$

7 8 9

6 5 4

3 2 1

A-2*B

ans = 3x3

-13 -14 -15

-8 -5 -2

1 4

A*B

ans = 3x3

28 24 20

76 69 62

124 114 104

(transpose(A)+B)/2

ans = 3x3

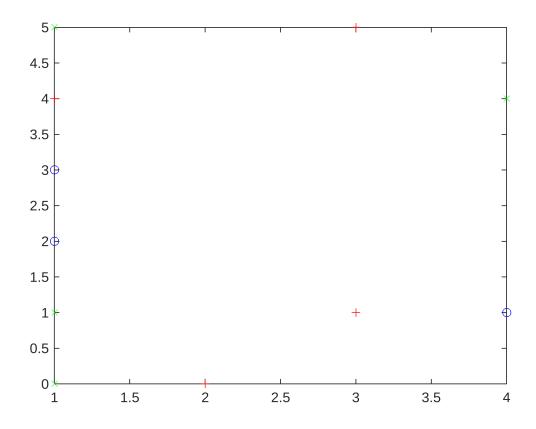
4 6 8

4 5 6

3 4 5

```
x = \begin{bmatrix} 1 & 3 & 2 & 3 \end{bmatrix}
x = \begin{bmatrix} 1 \times 4 & & & & \\ & 1 & & 3 & & 2 & & 3 \end{bmatrix}
y = \begin{bmatrix} 4 & 1 & 0 & 5 \end{bmatrix}
y = \begin{bmatrix} 1 \times 4 & & & \\ & 4 & & 1 & & 0 & & 5 \end{bmatrix}
z = \begin{bmatrix} 4 & 1 & 1 & 1 \end{bmatrix}
```

```
plot(x,y,'r +')
hold on
plot(z,x,'b o')
plot(z,y,'g x')
hold off
```



```
title('Plot 1')
xlabel('xaxis')
ylabel('yaxis')
```

