

```
>> B=[1 0 -1 1 0 1;0 -1 -3 1 3 5;-2 -1 1 -1 3 2;0 3 9 0 -12 7]
```

```
B =
```

```
 1  0 -1  1  0  1
 0 -1 -3  1  3  5
-2 -1  1 -1  3  2
 0  3  9  0 -12  7
```

```
>> null(B)
```

```
ans =
```

```
 0.3177 -0.5887
 0.8207  0.4986
 0.0445 -0.0395
-0.3622  0.6282
 0.2905  0.0489
 0.0890 -0.0790
```

```
>> rref(B)
```

```
ans =
```

```
 1.0000  0  0  0  1.0000 -6.8333
  0  1.0000  0  0 -4.0000  3.8333
  0  0  1.0000  0  0 -0.5000
  0  0  0  1.0000 -1.0000  7.3333
```

```
>>
```

```
>> B=sym([1 0 -1 1 0 1;0 -1 -3 1 3 5;-2 -1 1 -1 3 2;0 3 9 0 -12 7])
```

```
B =
```

```
[ 1, 0, -1, 1, 0, 1]
[ 0, -1, -3, 1, 3, 5]
[-2, -1, 1, -1, 3, 2]
[ 0, 3, 9, 0, -12, 7]
```

```
>> colspace(B)
```

```
ans =
```

```
[ 1, 0, 0, 0, 0]
[ 0, 1, 0, 0, 0]
[ 0, 0, 1, 0, 0]
[ 0, 0, 0, 1, 0]
```

```
>>
```

```
>> rank(B)
```

```
ans =
```

```
4
```

```
>>
```

```
>> A=[8 7 1;11 0 4;0 10 6]
```

```
A =
```

```
8 7 1
11 0 4
0 10 6
```

```
>> X=[3;19;2]
```

```
X =
```

```
3
19
2
```

```
>> A\X
```

```
ans =
```

```
1.0000
-1.0000
2.0000
```

```
>>
```

```
>> inv(A)*X
```

```
ans =
```

```
1.0000
-1.0000
2.0000
```

```
>> A^-1*X
```

```
ans =
```

```
1.0000
-1.0000
2.0000
```