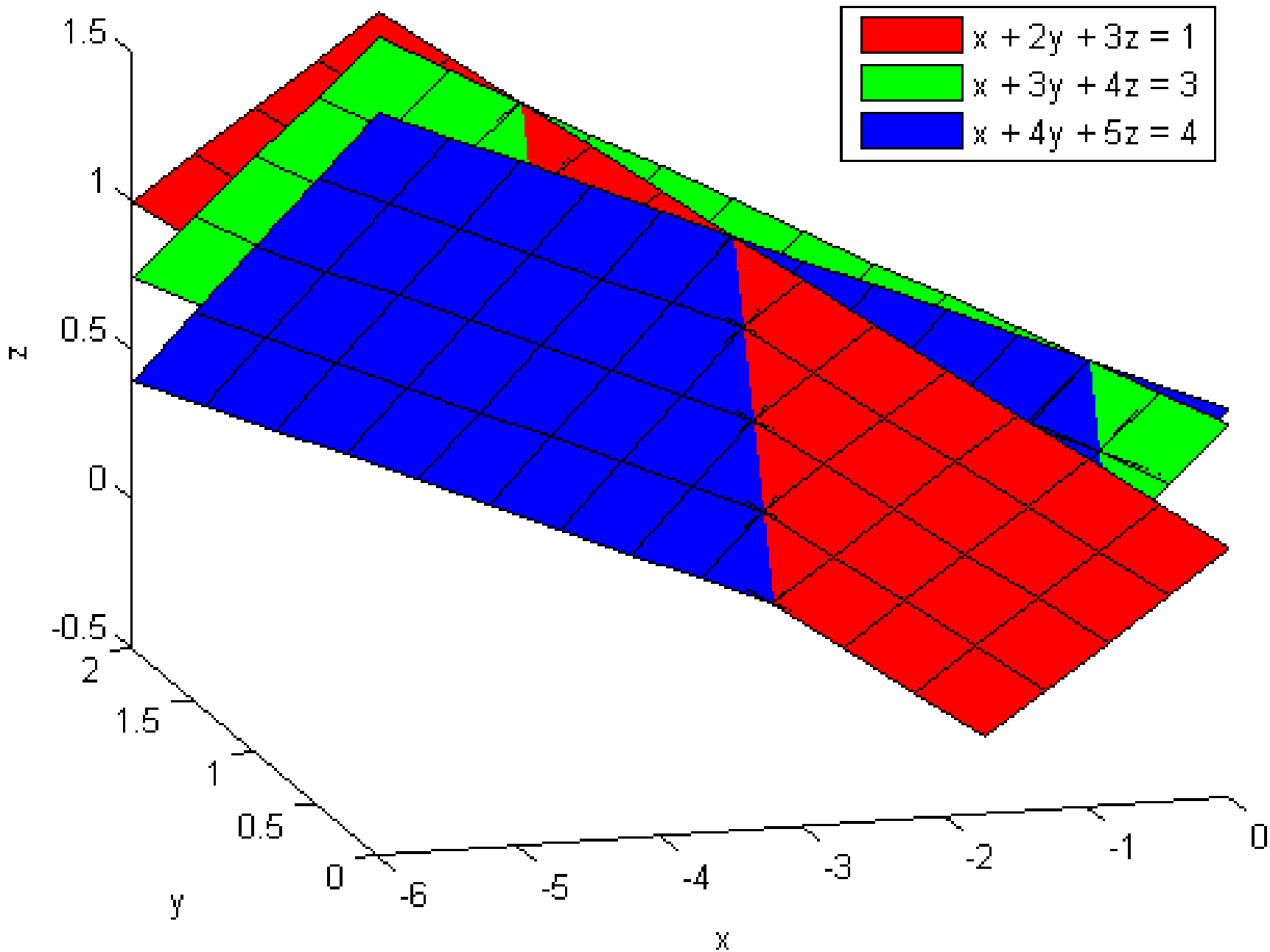
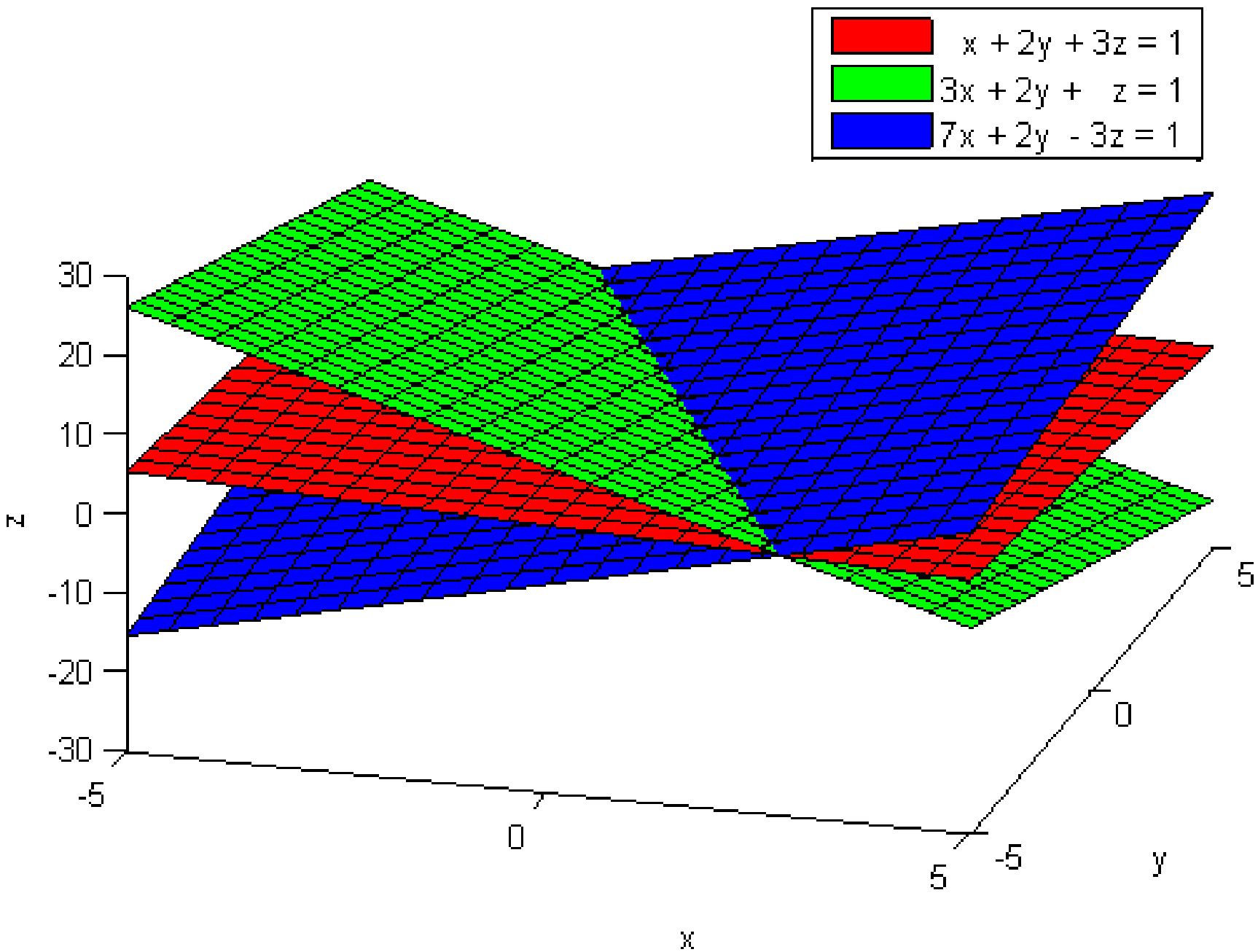

x + 2y + 3z = 1
x + 3y + 4z = 3
x + 4y + 5z = 4
z
1.5
1
0.5
0
-0.5
y
2
1.5
1
0.5
0
x
-6
-5
-4
-3
-2
-1
0

```
A = [1,2,3;1,3,4;1,4,5];
B = [1;3;4];
vecX = -6:0.5:0;
vecY = 0:0.5:2;
[x,y] = ndgrid(vecX,vecY);
colors = eye(3);
str = cell(3,1);
hold on
for i = 1:3,
    h = surf(x,y,(B(i)-A(i,1)*x-A(i,2)*y)./A(i,3));
    xlabel('x')
    ylabel('y')
    zlabel('z')
    set(h,'FaceColor',colors(i,:));
    str{i} = sprintf('%ix + %iy + %iz = %i',A(i,1),A(i,2),A(i,3),B(i));
end
legend(str{1},str{2},str{3})
axis([vecX(1),vecX(end),vecY(1),vecY(end),-0.5,1.5])
```


x + 2y + 3z = 1
3x + 2y + z = 1
7x + 2y - 3z = 1
30
20
10
0
-10
-20
-30
z
-5
0
5
x
-5
0
5
y

```
A = [1,2,3;3,2,1;7,2,-3];
B = [1;1;1];
vecX = -10:0.5:10;
vecY = -10:0.5:10;
[x,y] = ndgrid(vecX,vecY);
colors = eye(3);
str = cell(3,1);
hold on
for i = 1:3,
    h = surf(x,y,(B(i)-A(i,1)*x-A(i,2)*y)./A(i,3));
    xlabel('x')
    ylabel('y')
    zlabel('z')
    set(h,'FaceColor',colors(i,:));
    str{i} = sprintf('%ix + %iy + %iz = %i',A(i,1),A(i,2),A(i,3),B(i));
end
legend(str{1},str{2},str{3})
% axis([vecX(1),vecX(end),vecY(1),vecY(end),-0.5,1.5])
```