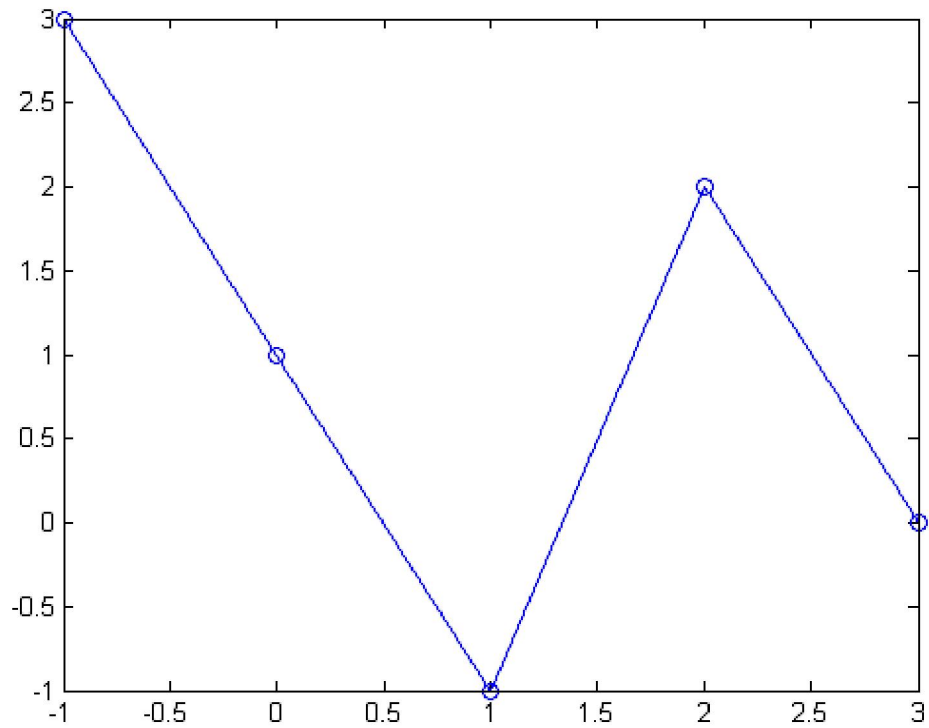
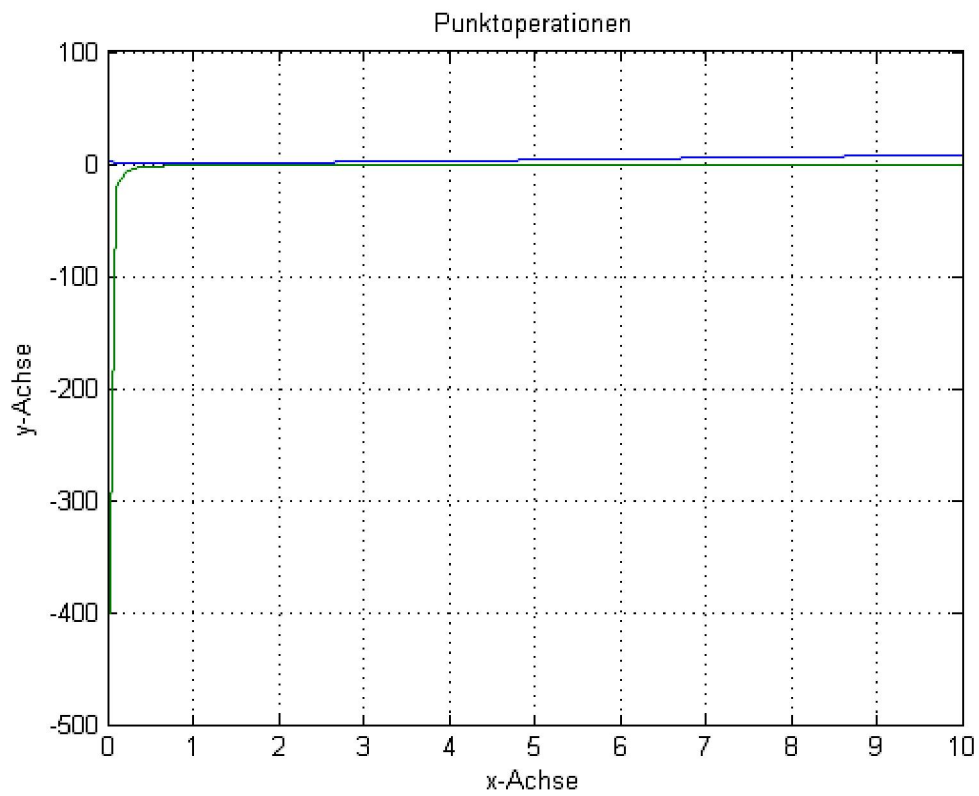


```
%Testataufgaben Kapitel 5
%Felix Rohrer
clear
format compact
```

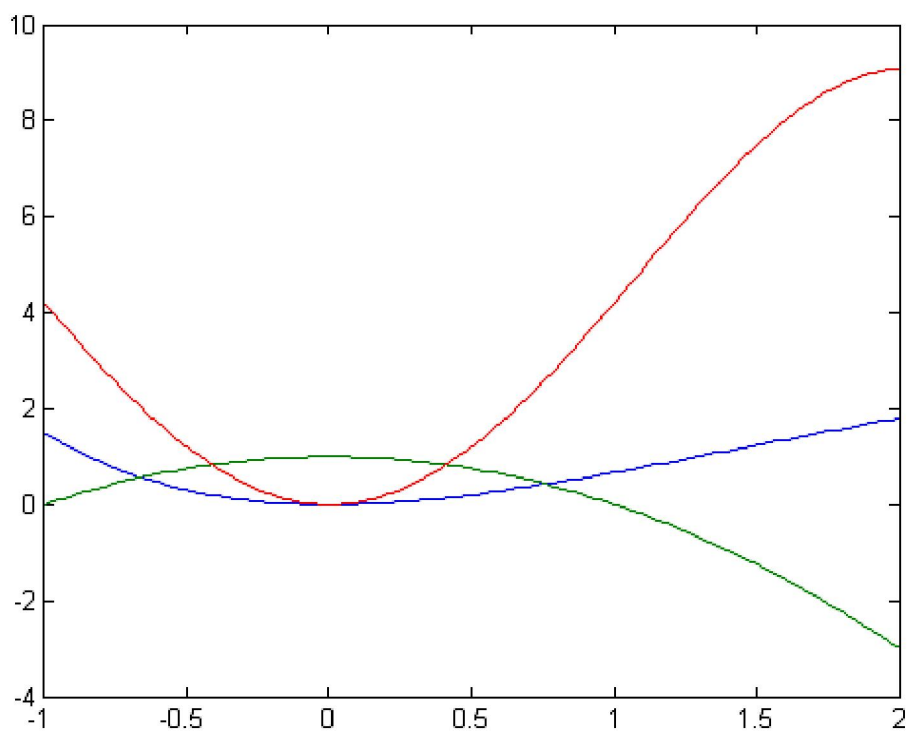
```
%Aufgabe 5.1
x=[-1 0 1 2 3];
y=[3 1 -1 2 0];
plot(x,y,'o-')
```



```
%Aufgabe 5.2
x=linspace(0.01,10);
y=(x.^2-x+2)./(x+1);
z=(log(x)-x)./x;
plot(x,y,x,z)
grid
xlabel('x-Achse')
ylabel('y-Achse')
title('Punktoperationen')
```



```
%Aufgabe 5.3
x=linspace(-1,2);
y1=x.^2.*exp(-0.4*x);
y2=-x.^2+1;
y3=5*x.*sin(x);
plot(x,y1,x,y2,x,y3)
```

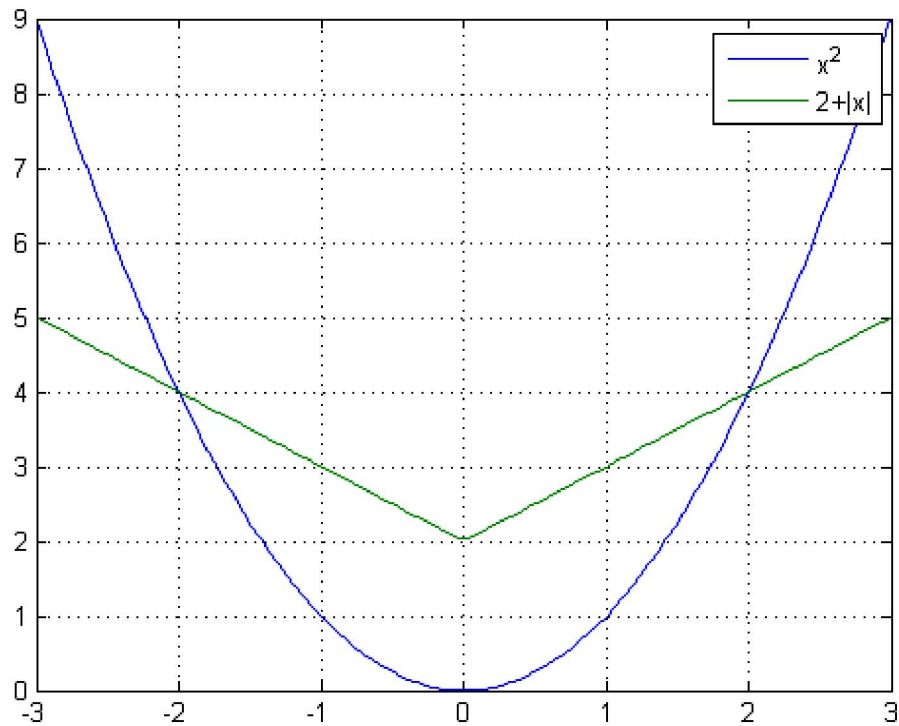


```
%Aufgabe 5.4
```

```

x=linspace(-3,3);
y=x.^2;
z=2+abs(x);
plot(x,y,x,z)
grid
legend('x^2','2+|x|')
%Für alle x < -2 und x > 2

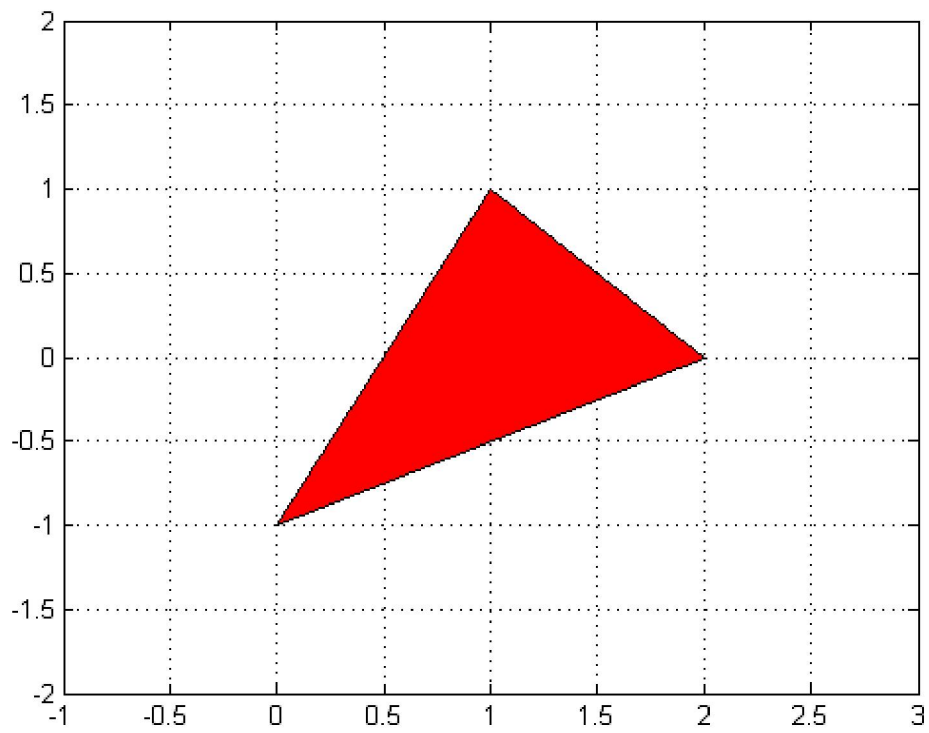
```



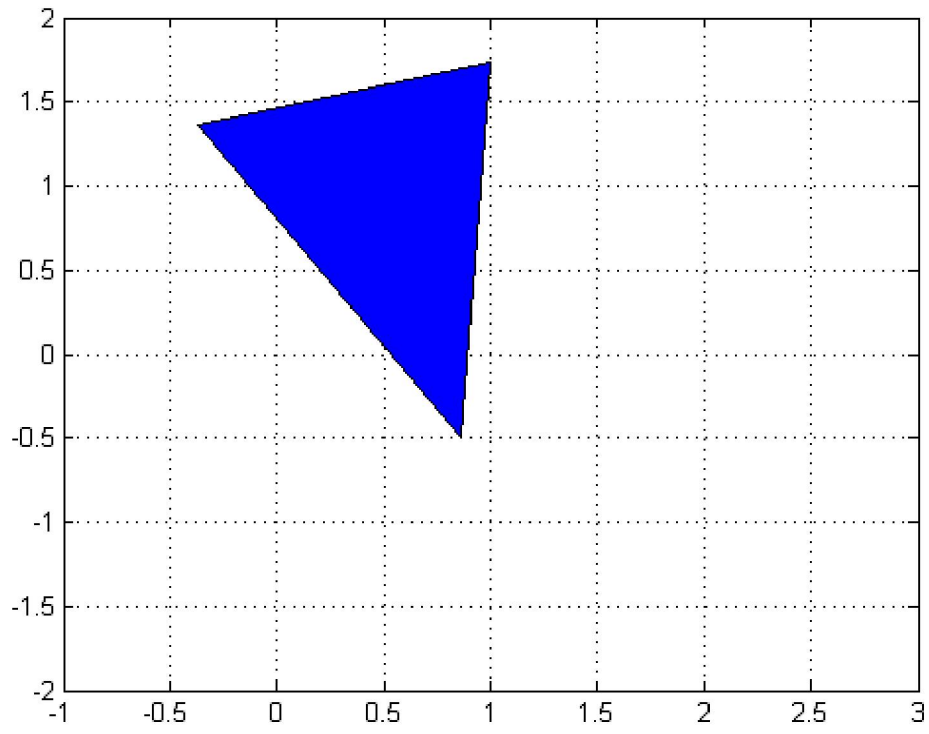
```

%Aufgabe 5.5
x=[2 1 0];
y=[0 1 -1];
fill(x,y,'r')
axis([-1 3 -2 2])
grid

```



```
P=[2;0];
Q=[1;1];
R=[0;-1];
D=[cosd(60) -sind(60);sind(60) cosd(60)];
P1=D*P;
Q1=D*Q;
R1=D*R;
A=[P1 Q1 R1 P1];
fill(A(1,:),A(2,:), 'b')
axis([-1,3,-2,2])
grid
```



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