

6.2 (b)

```
>> ezplot('(x^2/2+x+2)^2')    % c=2
>> axis([-2 0 -1 4])
>> grid minor on
```

Nejednoznacnost reseni pro $y(0)=0$:

```
>> hold on
>> ezplot('(x^2/2+x-2)^2')    % c=-2
>> axis([-4 2 -0.4 7])
```

%%

6.2 (c)

Rychly obrazek v dialog. okne:

```
>> ezplot('((x-3)^2/2 - 2)^2 - 1')
>> hold on
>> plot([-1 7],[-1 -1])
>> grid on
>> axis([-1 7 -2 7])
```

Lepsi obrazek - skriptem:

```
x = linspace(-2,7,100);
y = ((x-3).^2./2 - 2).^2 - 1;
    % indexy pruseciku s osou x
ind = find(y<-0.99);
il = ind(1); ip = ind(end);
    % spravne reseni
plot(x(1:il),y(1:il),'linewidth',2)
hold on
plot(x(ip:end),y(ip:end),'linewidth',2)
    % "falesne" reseni
plot(x(il:ip),y(il:ip),'--','linewidth',2)
    % konstantni reseni
plot([-1 7],[-1 -1],'linewidth',2)
    % mrizka a osy
grid minor on
plot([-1 7],[0 0],'k','linewidth',1.5)
plot([0 0],[-2 7],'k','linewidth',1)
axis([-1 7 -2 7])
```

%%

6.2 (d)

```
>> ezplot('-1/(sqrt(x^2+5)-4)')
>> grid on
>> hold on
>> plot([sqrt(11) sqrt(11)],[-5 5],'--')
>> plot([-sqrt(11) -sqrt(11)],[-5 5],'--')
```

%%

6.2 (e)

```
>> ezplot('tan(x-pi/2)')
>> axis([-2*pi 2*pi -100 100])
```