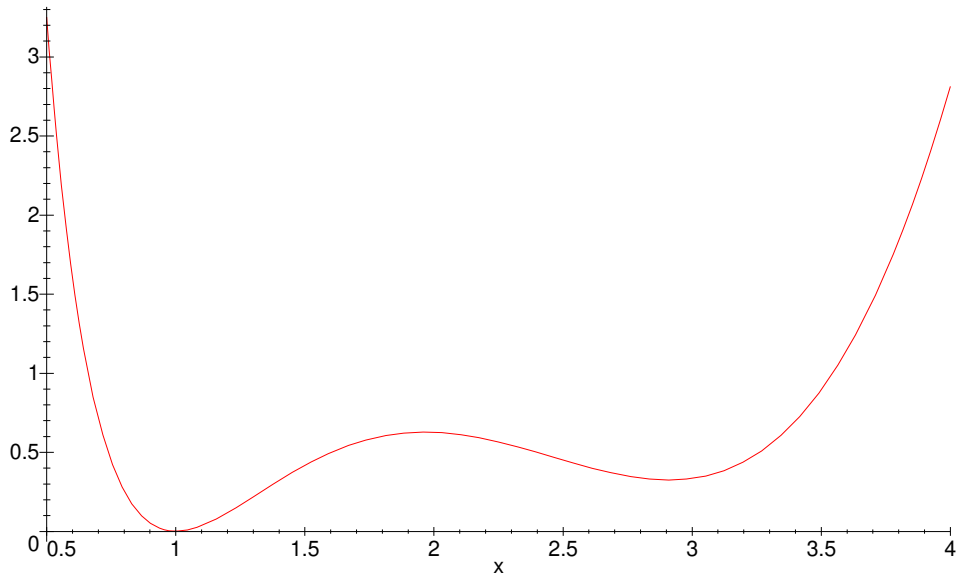
```
> U:=((x-1)^2*(1/4+(x-3)^2)/x);
```

$$U := \frac{(x-1)^2\left(\frac{1}{4}+(x-3)^2\right)}{x}$$

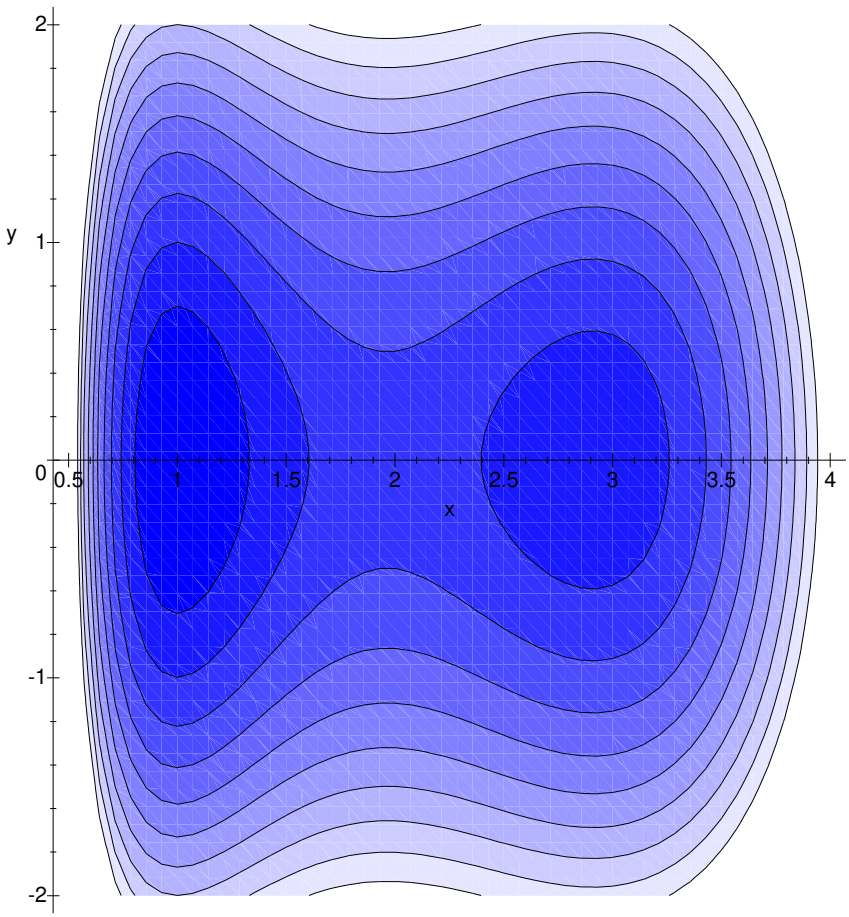
```
> plot(U,x=0.5..4);
```




```
> H:=y^2/2+U;
```

$$H := \frac{1}{2}y^2 + \frac{(x-1)^2\left(\frac{1}{4}+(x-3)^2\right)}{x}$$

```
> plots[contourplot](H,x=.5..4,y=-2..2,
        grid=[50,50],contours=[seq(i/4,i=1..10)],
        filled=true,coloring=[blue,white],scaling=CONSTRAINED);
```


2
1
0
-1
-2
y
0.5
1
1.5
2
2.5
3
3.5
4
x

>