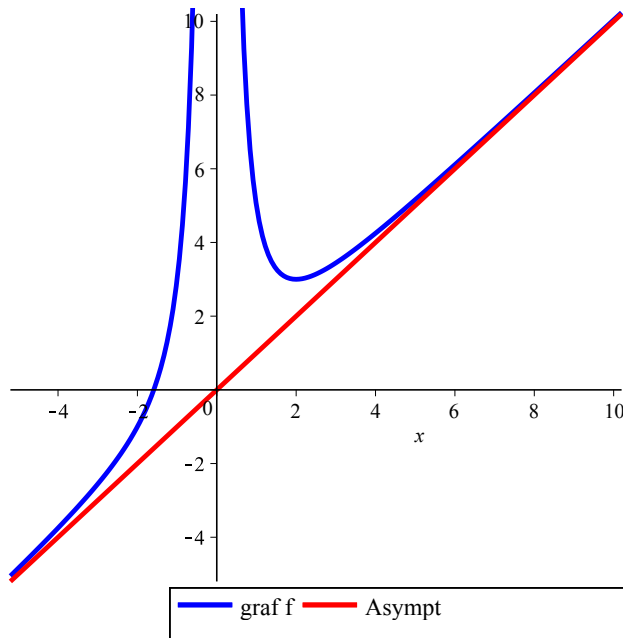


restart :

```
> with(Student[Calculus1]) : with(plots) :
```

$$f(x) = \frac{x^3 + 4}{x^2}$$

```
> plot( [ [  $\frac{x^3 + 4}{x^2}$ , x ], x = -5.2 .. 10.2, -5.2 .. 10.2, discont = true, color = [blue, red], legend  
= ["graf f", "Asympt"], tickmarks = [8, 10], thickness = 3 )
```

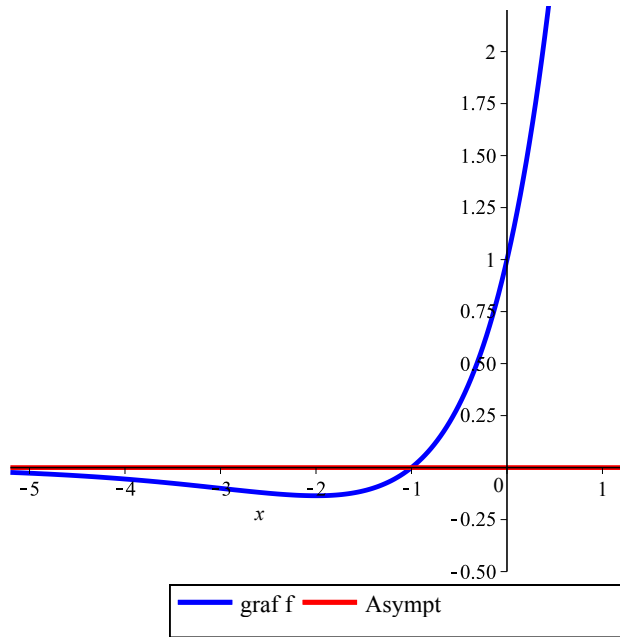


```
>
```

>

$$f(x) = (x + 1)e^x$$

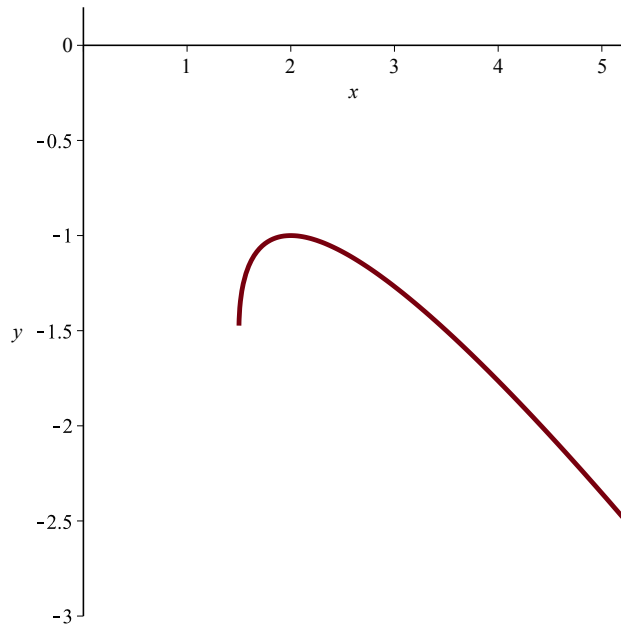
> `plot([(x + 1)e^x, 0], x=-5.2..1.2, -0.5..2.2, discont = true, color = [blue, red], legend = ["graf f", "Asympt"], tickmarks = [8, 10], thickness = 3)`



>

$$f(x) = \sqrt{2x-3} - x$$

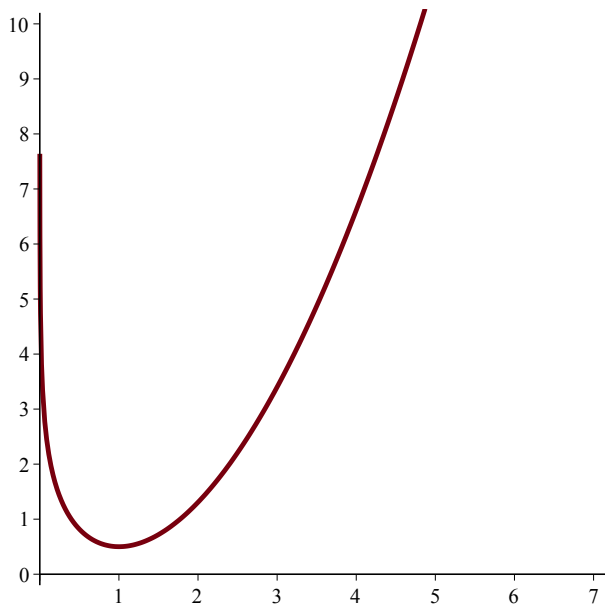
> plot($\sqrt{2x-3} - x$, x=0..5.2, y=-3..0.2, tickmarks=[8, 10], thickness=3)



>

$$f(x) = \frac{x^2}{2} - \ln(x)$$

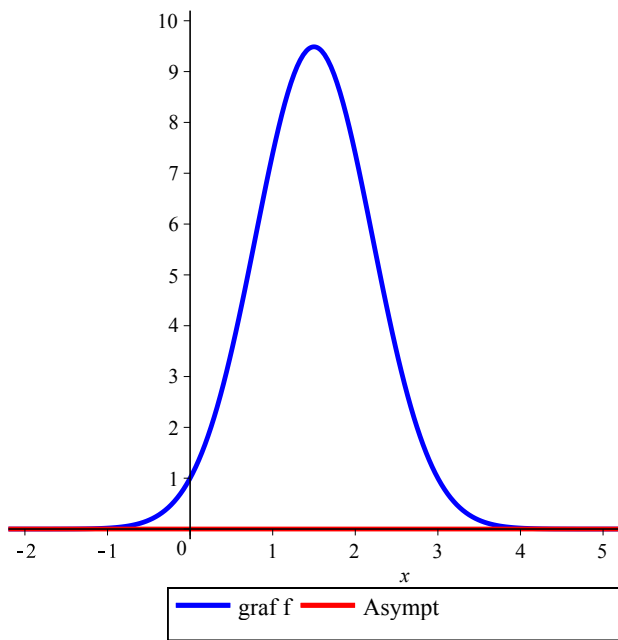
```
> plot( [ x,  $\frac{x^2}{2} - \ln(x)$ , x=-0.2..5 ], 0..7.2, -0.2..10.2, tickmarks = [8, 10], thickness = 3 )
```



```
>
```

$$f(x) = e^{3x-x^2}$$

```
> plot([e^{3x-x^2}, 0], x=-2.2..5.2, -0.2..10.2, discont = true, color = [blue, red], legend = ["graf f", "Asympt"], tickmarks = [8, 10], thickness = 3 )
```



```
>
```