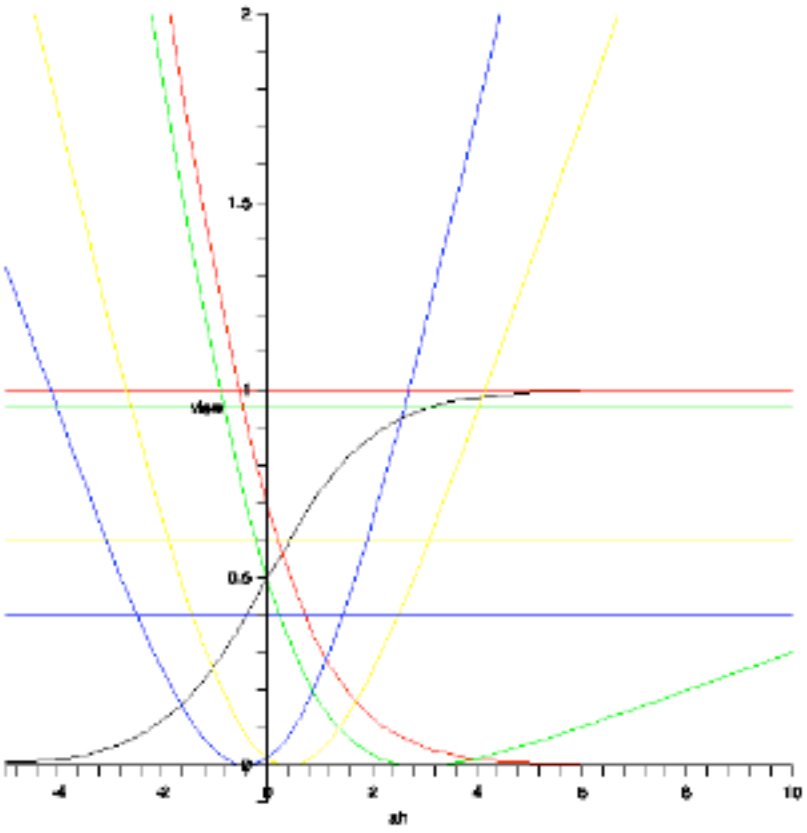
```
> sigma:=x->exp(x)/(1+exp(x));
```

$$\sigma := x \to \frac{e^{x}}{1 + e^{x}}$$

```
> loss:=(y,ah)->y*ln(y/sigma(ah))+(1-y)*ln((1-y)/(1-sigma(ah)));
```

$$loss := (y, ah) \to y \ln\left(\frac{y}{\sigma(ah)}\right) + (1 - y) \ln\left(\frac{1 - y}{1 - \sigma(ah)}\right)$$

```
> plot([sigma(ah),.99999,loss(.99999,ah),.95,loss(.95,ah),.6,loss(.6,ah),.4,
```




```
>
>
>
```