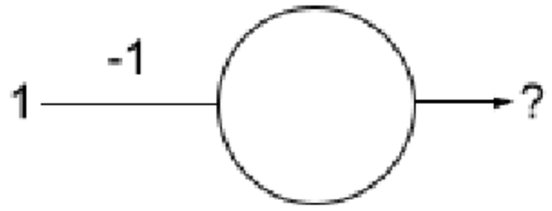
a.

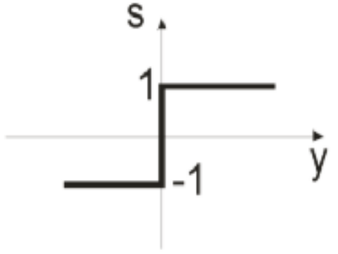


LR:
soma = (1 * -1) = -1
y = -1 (s <= 0)

FR:
soma1=(1*-1) = -1
y1 = 0 (s<0, y=0)

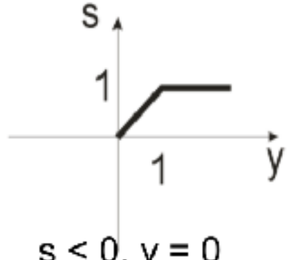
FS:
soma1=(1*-1) = -1
y= -1+1/(1-(-1))
y= -1+1/2
y= -1/2

Limite Rápido



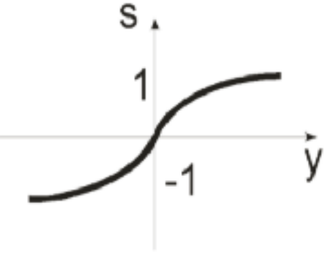
s ≤ 0, y = -1
s > 0, y = 1

Função Rampa



s < 0, y = 0
0 ≤ s ≤ 1, y = s
s > 1, y = 1

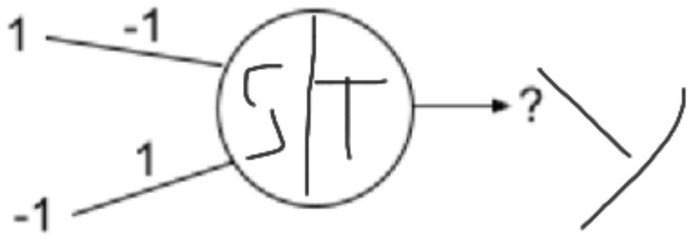
Função Sigmóide



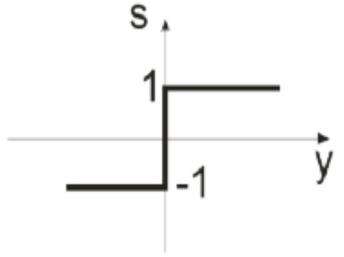
s ≥ 0, y = 1 -1/(1 + s)
s < 0, y = -1 +1/(1 - s)

$$-\frac{2}{2} + \frac{1}{2} = \frac{-1}{2}$$

b.



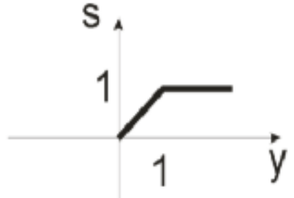
Limite Rápido



$s \leq 0, y = -1$

$s > 0, y = 1$

Função Rampa

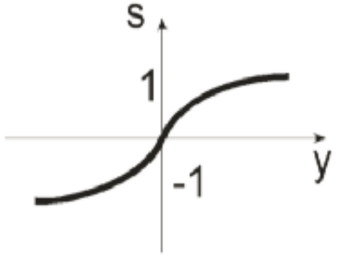


$s < 0, y = 0$

$0 \leq s \leq 1, y = s$

$s > 1, y = 1$

Função Sigmóide



$s \geq 0, y = 1 - 1/(1 + s)$

$s < 0, y = -1 + 1/(1 - s)$

LR:

soma= (1 * -1) + (-1 * 1) = -1 + (-1) = -2

y = -1 (s<=0)

FR:

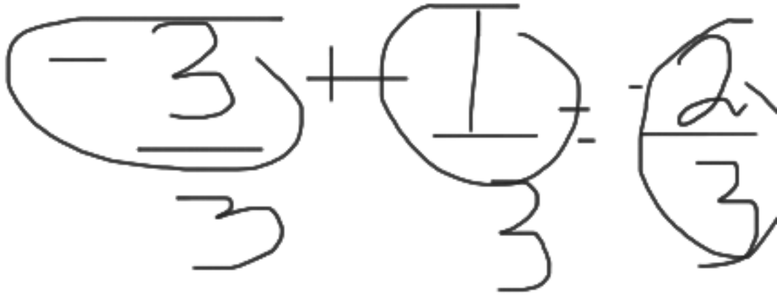
soma: (1 * -1) + (-1 * 1) = -2

y= 0 (s<0)

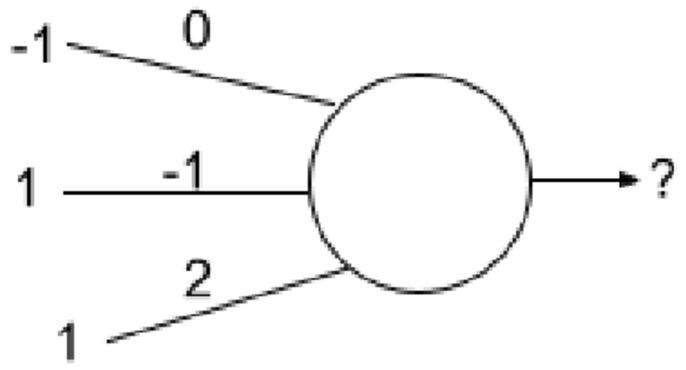
FS:

soma = (1 * -1) + (-1 * 1) = -2

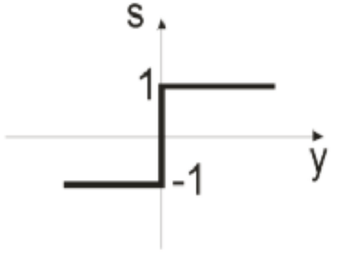
y= -1 + 1/(1-(-2))
y= -1 + 1/(1+2)
y= -1 + 1/3
y= -2/3



c.



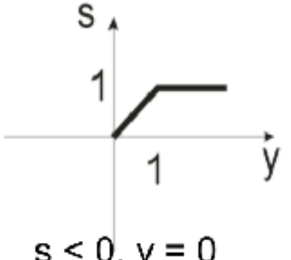
Limite Rápido



$s \leq 0, y = -1$

$s > 0, y = 1$

Função Rampa

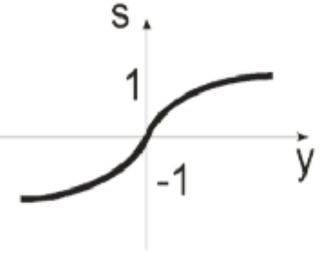


$s < 0, y = 0$

$0 \leq s \leq 1, y = s$

$s > 1, y = 1$

Função Sigmóide



$s \geq 0, y = 1 - 1/(1 + s)$

$s < 0, y = -1 + 1/(1 - s)$

LR:

soma = (-1*0)+(1*-1)+(1*2) = 0+(-1)+2 = 1

y = 1 (s > 0)

FR:

soma1= (-1*0)+(1*-1)+(1*2)=0+(-1)+2

soma1=1

y = 1

FS:

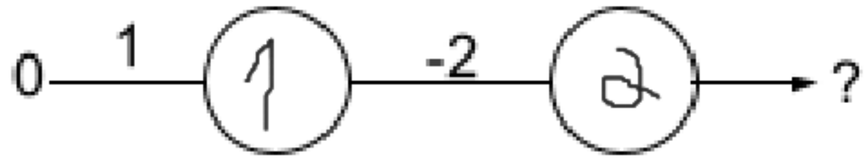
soma1 = (-1*0)+(1*-1)+(1*2) = 0+(-1)+2 = 1

y = 1-1/(1+1)

y = 1-1/2

y = 1/2

d.



LR:
soma1 = (0*1) = 0
y1 = -1(s<=0)

soma2 = (-1*-2) = 2
y2 = 1 (s>0)

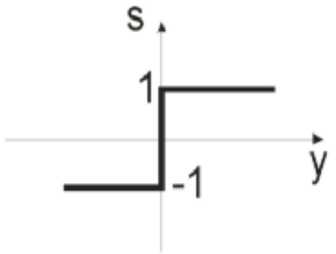
FR:
soma1= (0*1) = 0
y = 0

soma2= (0*-2) = 0
y=0

FS:
soma1= (0*1) = 0
y = 1 -1/(1+0)
y = 1 -1/1
y = 0

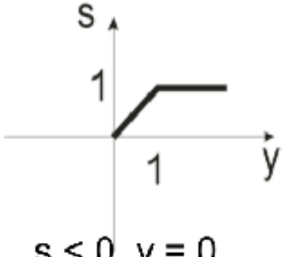
soma2= (0*-2)=0
y = 1 -1/(1+0)
y = 1 -1/1
y = 0

Limite Rápido



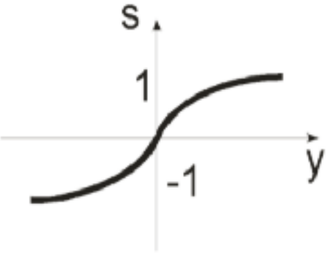
s ≤ 0, y = -1
s > 0, y = 1

Função Rampa



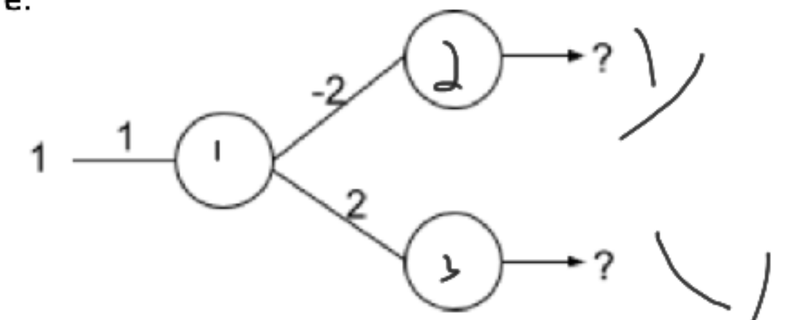
s < 0, y = 0
0 ≤ s ≤ 1, y = s
s > 1, y = 1

Função Sigmóide

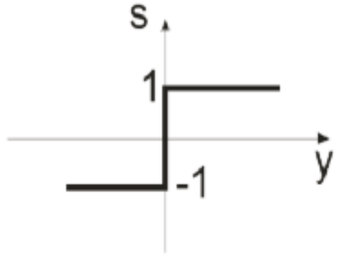


s ≥ 0, y = 1 -1/(1 + s)
s < 0, y = -1 +1/(1 - s)

e.



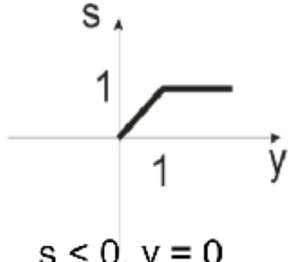
Limite Rápido



$s \leq 0, y = -1$

$s > 0, y = 1$

Função Rampa

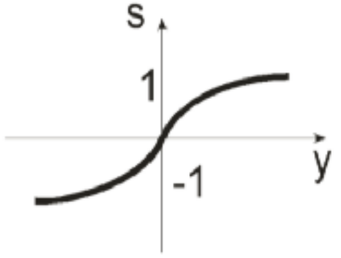


$s < 0, y = 0$

$0 \leq s \leq 1, y = s$

$s > 1, y = 1$

Função Sigmóide



$s \geq 0, y = 1 - 1/(1 + s)$

$s < 0, y = -1 + 1/(1 - s)$

LR:

soma1= (1*1)= 1

y1 = 1 (s>0)

soma2 = (1 * -2) = -2

y2 = -1 (s<=0)

soma3= (1 * 2) = 2

y3 = 1 (s>0)

FR:

soma1= (1*1) = 1

y1 = 1 (0<=s<=1)

soma2 = (1 * -2) = -2

y2 = 0 (s<0)

soma3 = (1 * 2) = 2

y3 = 1 (s>1)

FS:

soma1 = (1*1)= 1

y1= 1 - 1/(1+1) = 1 - 1/2 = 1/2

soma2 = (1/2 * -2) = -1

y2 = -1 + 1/(1-(-1)) = -1 + 1/2 = -1/2

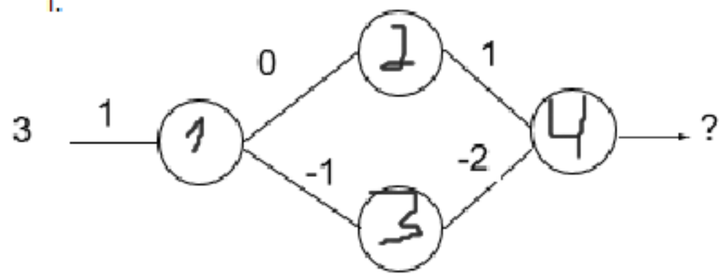
y2 = -1/2

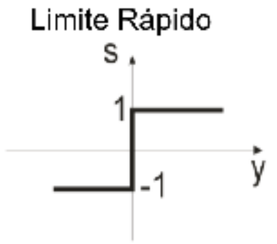
soma3 = (1/2 * 2) = 1

y3= 1 - 1/(1+1) = 1 - 1/2 = 1/2

y3 = 1/2

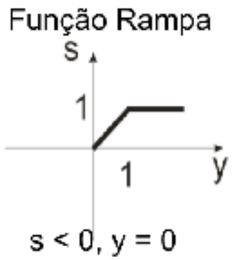
f.





$s \leq 0, y = -1$

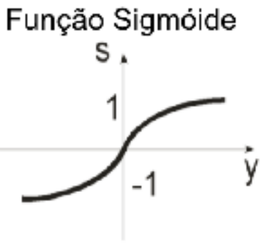
$s > 0, y = 1$



$s < 0, y = 0$

$0 \leq s \leq 1, y = s$

$s > 1, y = 1$



$s \geq 0, y = 1 - 1/(1 + s)$

$s < 0, y = -1 + 1/(1 - s)$

LR:

soma1 = (3*1) = 3

y1 = 1

soma2 = (1*0) = 0

y2 = -1

soma3 = (1*-1) = -1

y3 = -1

soma4 = (-1*1) + (-1*-2) = -1 + 2 = 1

y4 = 1

FR:

soma1: (3*1) = 3

y1= 1

soma2 = (1*0) = 0

y2 = 0

soma3 = (1*-1) = -1

y3=0

soma4= (0*1) + (0*-2)= 0

y4= 0

FS:

soma1=(3*1) = 3

y= 1-1/(1+3)

y=1-1/4

y1= 3/4

soma2=(3/4*0) = 0

y=1-1/(1+0)

y=1-1/1

y2=0

soma3=(3/4*-1) = -3/4

y= -1+1/(1- (-3/4))

y=-1+1/7/4

y3= -3/7

soma4= (0*1)+(-3/7*(-2)) = 6/7

y= 1-1/(1+6/7)

y= 1-1/13/7

y4= 6/13