Redes Neurais foi vida

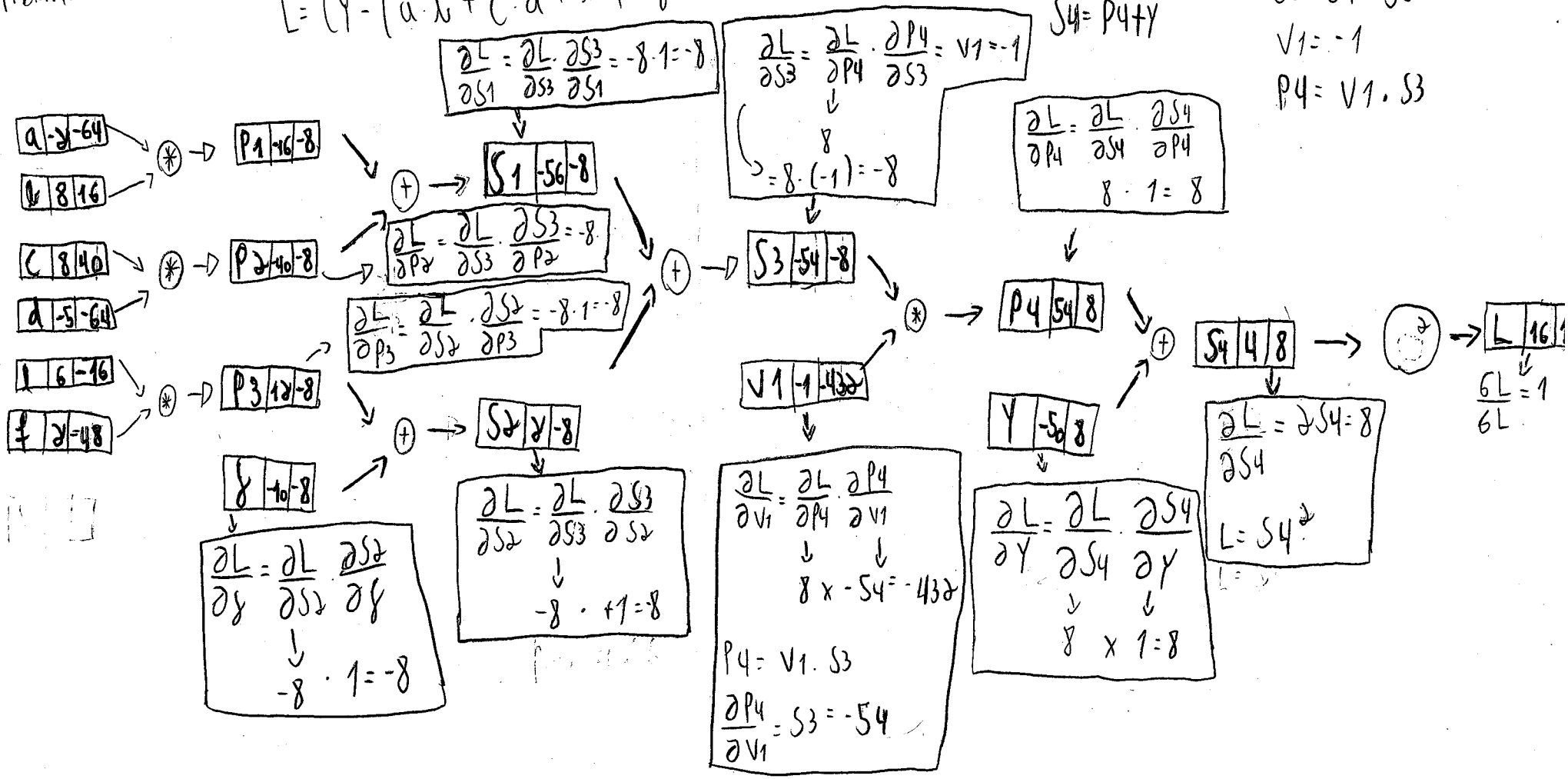
Montanha 3.1

Faça lm uma folha o grafo computacional de

$L = (Y - (a \cdot b + c \cdot d + l \cdot f + g))^2$

$a \cdot b = P1$
$c \cdot d = P2$
$l \cdot f = P3$

$P1 + P2 = S1$
$P3 + g = S2$
$S3 = S1 + S2$
$V1 = -1$
$P4 = V1 \cdot S3$
$S4 = P4 + Y$



Derivadas parciales restantes — José Victor

P1: $\frac{\partial L}{\partial P1} = \frac{\partial L}{\partial S1} \cdot \frac{\partial S1}{\partial P1} = 1 \cdot (-8) = -8$ ($\frac{\partial S1}{\partial P1} = 1$)

a: $\frac{\partial L}{\partial a} = \frac{\partial L}{\partial P1} \cdot \frac{\partial P1}{\partial a}$ $P1 = a \cdot b$

$-8 \cdot b = -8 \cdot 8 = -64$ $\frac{\partial P1}{\partial a} = b$

b: $\frac{\partial L}{\partial b} = \frac{\partial L}{\partial P1} \cdot \frac{\partial P1}{\partial b}$ ($\frac{\partial P1}{\partial b} = a$)

$-8 \cdot a = -8 \cdot (-2) = 16$

c: $\frac{\partial L}{\partial c} = \frac{\partial L}{\partial P2} \cdot \frac{\partial P2}{\partial c}$ $P2 = c \cdot d$

$-8 \cdot d = -8 \cdot (-5) = 40$

d: $\frac{\partial L}{\partial d} = \frac{\partial L}{\partial P2} \cdot \frac{\partial P2}{\partial d}$

$-8 \cdot c = -8 \cdot 8 = -64$

l: $\frac{\partial L}{\partial l} = \frac{\partial L}{\partial P3} \cdot \frac{\partial P3}{\partial l}$ $P3 = l \cdot f$

$-8 \cdot f = -8 \cdot 2 = -16$

f: $\frac{\partial L}{\partial f} = \frac{\partial L}{\partial P3} \cdot \frac{\partial P3}{\partial f}$

$-8 \cdot l = -8 \cdot 6 = -48$