$$F_m(m,b) = -2\left(\sum_{i=1}^{n} x_i^2\right)m - 2\left(\sum_{i=1}^{n} x_i\right)b + 2\left(\sum_{i=1}^{n} x_i y_i\right)$$

$$F_b(m,b) = -2\left(\sum_{i=1}^{n} x_i\right) - 2\left(\sum_{i=1}^{n} 1\right)b + 2\left(\sum_{i=1}^{n} y_i\right) = 0$$

a)

x	1	2	3	4
y	1	3	4	3

$F_m(m,b) = -2(30)m - 2(10)b + 2(31) \Rightarrow 60m + 20b = 62$

$F_b(m,b) = -2(10)m - 2(4)b + 2(11) \Rightarrow -3/\ 20m + 8b = 22$

$60m + 20b = 62$

$-60m - 24b = -66$

$-4b = -4$

$b = 1$ | $m = 0{,}7$

ç)

x	1	2	3	4	5
y	2	3	3	2	3

$F_m(m,b) = -2(65)m - 2(15)b + 2(40) \Rightarrow 130m + 30b = 80$

$F_b(m,b) = -2(15)m - 2(5)b + 2(13) \Rightarrow -3/\ 30m + 10b = 26$

$130m + 30b = 80$

$-90m - 30b = -78$

$40m = 2$

$m = 0.05$

$b = 2.45$