

$$p(c|x) = \frac{(\exp(\sum_{i=1}^{N} w_i f_i(c, x)))}{(\sum_{c' \in C} \exp(\sum_{i=1}^{N} w_i f_i(c', x)))}$$

p(c divides x) = (exp (sum from i=1 to N w_i f_i(c,x))) over (sum from c^! in C exp(sum from i=1 to N w_i f_i(c^!,x)))