line: 
$$s_k^{(ij)} := \frac{f_k(x_k^{(j)})}{f_k(x_k^{(j)})}$$

[RGB]0,0,60- 
$$f_k(x_k^{(i)})||x_k^{(j)} - x_k^{(i)}||, v_k^{(ij)} := \frac{x_k^{(j)}}{2}$$
  
[RGB]0,0,165-  $x_k^{(i)}|x_k^{(j)} - x_k^{(i)}||, a_k^{(ij)} := \frac{L_f}{2}||x_k^{(j)} - norm_s tr$ :