

$$\mathbf{k}_{MK}(\text{[red_high_freq, grey_med_freq, teal_high_freq, blue_high_freq]}, \text{[red_low_freq, grey_low_freq, teal_low_freq, blue_low_freq]}) \\
 = \mathbf{k}_1(\text{[red_high_freq]}, \text{[red_low_freq]}) + \dots + \mathbf{k}_1(\text{[blue_high_freq]}, \text{[blue_low_freq]})$$