

$$J\left(x+((H_{n,d}(s)\odot A)\,x)^d,x\right)\equiv J\left(\xi+(A\xi)^d;\xi\right)\Bigg|_{\xi_j=x_js_j^d}\binom{\Pi}{1}s_k\Bigg|^{d-1},\mathfrak{Z}mu_{j=1,\dots,n}$$