

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