Which of the following is the Quotient of $-3 k^6 - 9 k^5 + 9 k^4 + 43 k^3 + 15 k^2 - 31 k - 15$ divided by $(-k-1)^2 (1-k)$ $+ (3 k^3)$ $+ (|6|k^2|)$ + (- 12 k $+ ((3 k^3))$ $+((-3 k^{5}))$ $+((3 k^4)$ $+ (6) k^4$ $+ (40) k^3 + (15) k^2 + (-31) k + (-15)$ $+((-6 k^4))$ $+((6 k^3))$ $+((6 k^2))$ $+ (34) k^3 + (9) k^2$ $+(12)k^4$ +(-31)k + (-15) $+((12 k^4))$ $+((12 k^3)) + ((-12 k^2)) + ((-12 k))$ $+ (22) k^3$ $+ (21) k^2$ + (-19) k $+((22 k^3)) + ((22 k^2))$ +((-22 k))+ ((-22)) $+(|-k^2|)$ + (3 k)

Coefficient list: {3, 6, -12, -22}