

2.

Which of the following is the Quotient of $-3k^6 + 9k^5 - 3k^4 - 11k^3 + 9k^2 + k - 1$ divided by $(-k - 1)(1 - k)^2$

$$\begin{array}{r}
 + (3k^3) + (-6k^2) + (2) \\
 \hline
 (-k-1)(1-k)^2 \quad (-3)k^6 + (9)k^5 + (-3)k^4 + (-11)k^3 + (9)k^2 + (1)k + (-1) \\
 (-3k^6) + (3k^5) + (3k^4) + (-3k^3) \\
 + (6)k^5 + (-6)k^4 + (-8)k^3 + (9)k^2 + (1)k + (-1) \\
 + (6k^5) + (-6k^4) + (-6k^3) + (6k^2) \\
 + (-2)k^3 + (3)k^2 + (1)k + (-1) \\
 + (-2k^3) + (2k^2) + (2k) + (-2) \\
 + (k^2) + (-k) + (1)
 \end{array}$$

Coefficient list:

$\{3, -6, 0, 2\}$