

1.

Which of the following is the Quotient of $-3u^6 - 9u^5 + 9u^4 + 43u^3 + 15u^2 - 33u - 18$ divided by $(-u - 2)^2(1 - u)$

$$\begin{array}{r}
 + (3u^3) + (-4) \\
 \hline
 (-u-2)^2(1-u) \quad (-3)u^6 + (-9)u^5 + (9)u^4 + (43)u^3 + (15)u^2 + (-33)u + (-18) \\
 + (-3u^6) + (-9u^5) + (12u^3) \\
 + (9)u^4 + (31)u^3 + (15)u^2 + (-33)u + (-18) \\
 + (9u^4) + (27u^3) + (-36u) \\
 + (4)u^3 + (15)u^2 + (3)u + (-18) \\
 + (4u^3) + (12u^2) + (-16) \\
 + (3u^2) + (3u) + (-2)
 \end{array}$$

Coefficient list:

$\{3, 0, -9, -4\}$