

3.

Which of the following is the Quotient of $-3e^6 - 15e^5 - 21e^4 + e^3 + 19e^2 + 11e + 4$ divided by $(-e - 2)^2(1 - e)$

$$\begin{array}{r}
 \begin{array}{c} (-e-2)^2(1-e) \end{array} \overline{ \begin{array}{r} (-3)e^6 + (-15)e^5 + (-21)e^4 + (1)e^3 + (19)e^2 + (11)e + (4) \\
 (-3e^6) + (-9e^5) + (12e^3) \\
 + (-6e^5) + (-21)e^4 + (-11)e^3 + (19)e^2 + (11)e + (4) \\
 + (-6e^5) + (-18e^4) + (24e^2) \\
 + (-3)e^4 + (-11)e^3 + (-5)e^2 + (11)e + (4) \\
 + (-3e^4) + (-9e^3) + (12e) \\
 + (-2)e^3 + (-5)e^2 + (-1)e + (4) \\
 + (-2e^3) + (-6e^2) + (8) \\
 + (e^2) + (-e) + (-4)
 \end{array} }
 \end{array}$$

Coefficient list:

{3, 6, 3, 2}