

5.

Which of the following is the Quotient of $-3e^6 + 3e^5 + 18e^4 - 14e^3 - 23e^2 - 4$ divided by $(-e - 1)(2 - e)^2$

$$\begin{array}{r}
 + (3e^3) + (6e^2) + (2) \\
 \hline
 (-e-1)(2-e)^2 \quad (-3)e^6 + (3)e^5 + (18)e^4 + (-14)e^3 + (-23)e^2 + (-4) \\
 + (-3e^6) + (9e^5) + (-12e^3) \\
 + (-6)e^5 + (18)e^4 + (-2)e^3 + (-23)e^2 + (-4) \\
 + (-6e^5) + (18e^4) + (-24e^2) \\
 + (-2)e^3 + (1)e^2 + (-4) \\
 + (-2e^3) + (6e^2) + (-8) \\
 + (-5e^2) + (4)
 \end{array}$$

Coefficient list:

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