

4.

Which of the following is the Quotient of $-3e^6 - 12e^5 - 3e^4 + 40e^3 + 56e^2 + 23e + 2$ divided by $-(-e - 2)^2 e$

$$\begin{array}{r}
 + (3e^3) + (-4) \\
 \hline
 -(-e-2)^2 e \quad (-3)e^6 \quad +(-12)e^5 \quad +(-3)e^4 \quad + (40)e^3 \quad + (56)e^2 \quad + (23)e \quad + (2) \\
 \quad (-3e^6) \quad + (-12e^5) \quad + (-12e^4) \\
 \quad + (9)e^4 \quad + (40)e^3 \quad + (56)e^2 \quad + (23)e \quad + (2) \\
 \quad + (9e^4) \quad + (36e^3) \quad + (36e^2) \\
 \quad + (4)e^3 \quad + (20)e^2 \quad + (23)e \quad + (2) \\
 \quad + (4e^3) \quad + (16e^2) \quad + (16e) \\
 \quad + (4e^2) \quad + (7e) \quad + (2)
 \end{array}$$

Coefficient list:

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