4.

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

$$
\begin{array}{r}
+ (\boxed{3n^3}) \quad + (\boxed{-3n^2}) \qquad\qquad + (\boxed{2})
\end{array}
$$

$(-n-1)^2(2-n)$ $\quad$ $(-3)n^6 \quad +(3)n^5 \quad +(9)n^4 \quad +(-5)n^3 \quad +(-5)n^2 \quad +(3)n \quad +(2)$

$(\boxed{-3n^6}) \qquad\qquad +(\boxed{9n^4}) \quad +(\boxed{6n^3})$

$\qquad\qquad +(3)n^5 \qquad\qquad\qquad +(-11)n^3 \quad +(-5)n^2 \quad +(3)n \quad +(2)$

$\qquad\qquad +(\boxed{3n^5}) \qquad\qquad\qquad +(\boxed{-9n^3}) \quad +(\boxed{-6n^2})$

$\qquad\qquad\qquad\qquad\qquad\qquad\qquad +(-2)n^3 \quad +(1)n^2 \quad +(3)n \quad +(2)$

$\qquad\qquad\qquad\qquad\qquad\qquad\qquad +(\boxed{-2n^3}) \qquad\qquad +(\boxed{6n}) \quad +(\boxed{4})$

$\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad +(\boxed{n^2}) \quad +(\boxed{-3n}) \quad +(\boxed{-2})$

Coefficient list:

{3, -3, 0, 2}