

4.

Which of the following is the Quotient of $-3a^6 + 9a^5 + 6a^4 - 38a^3 + 27a^2 + 4a - 8$ divided by $(1-a)a^2$

$$\begin{array}{r}
 + (3a^3) + (-6a^2) + (-12a) + (26) \\
 \hline
 (1-a)a^2 \quad (-3)a^6 \quad + (9)a^5 \quad + (6)a^4 \quad + (-38)a^3 \quad + (27)a^2 \quad + (4)a \quad + (-8) \\
 \quad (-3a^6) \quad + (3a^5) \\
 \quad + (6)a^5 \quad + (6)a^4 \quad + (-38)a^3 \quad + (27)a^2 \quad + (4)a \quad + (-8) \\
 \quad + (6a^5) \quad + (-6a^4) \\
 \quad + (12)a^4 \quad + (-38)a^3 \quad + (27)a^2 \quad + (4)a \quad + (-8) \\
 \quad + (12a^4) \quad + (-12a^3) \\
 \quad + (-26)a^3 \quad + (27)a^2 \quad + (4)a \quad + (-8) \\
 \quad + (-26a^3) \quad + (26a^2) \\
 \quad + (a^2) \quad + (4a) \quad + (-8)
 \end{array}$$

Coefficient list:

$\{3, -6, -12, 26\}$