Which of the following is the Quotient of $-3 w^6 + 27 w^4 - 2 w^3 - 72 w^2 + 48$ divided by $(-w - 2)^2 (1 - w)$ $(-w-2)^{2}$ (1-w) (-3) w^{6} $+(27) w^4 + (-2) w^3 + (-72) w^2 + (48)$ $+ ((12 \text{ w}^3))$ $+(27) w^4 + (-14) w^3 + (-72) w^2 + (48)$

 $+ (|6 w^2|)$

Coefficient list:

 $\{3, -9, 0, 14\}$