

3.

Which of the following is the Quotient of  $-3b^6 + 15b^5 - 21b^4 - 5b^3 + 29b^2 - 13b - 4$  divided by  $-(1-b)^2b$

$$\begin{array}{r}
 \phantom{-(1-b)^2b} \phantom{(-3)b^6} \phantom{+(15)b^5} \phantom{+(-21)b^4} + (3b^3) + (-9b^2) + (14) \\
 \hline
 -(1-b)^2b \phantom{(-3)b^6} + (-3)b^6 + (15)b^5 + (-21)b^4 + (-5)b^3 + (29)b^2 + (-13)b + (-4) \\
 \phantom{-(1-b)^2b} (-3b^6) + (6b^5) + (-3b^4) \\
 \phantom{-(1-b)^2b} + (9)b^5 + (-18)b^4 + (-5)b^3 + (29)b^2 + (-13)b + (-4) \\
 \phantom{-(1-b)^2b} + (9b^5) + (-18b^4) + (9b^3) \\
 \phantom{-(1-b)^2b} + (-14)b^3 + (29)b^2 + (-13)b + (-4) \\
 \phantom{-(1-b)^2b} + (-14b^3) + (28b^2) + (-14b) \\
 \phantom{-(1-b)^2b} + (b^2) + (b) + (-4)
 \end{array}$$

Coefficient list:

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