

1.

Which of the following is the Quotient of $-3b^6 + 9b^5 + 3b^4 - 23b^3 + 3b^2 + 3b + 4$ divided by $-(-b-1)^2b$

$$\begin{array}{r}
 + (3b^3) + (-15b^2) + (24b) + (-10) \\
 \hline
 (-(-b-1)^2b) \quad (-3)b^6 + (9)b^5 + (3)b^4 + (-23)b^3 + (3)b^2 + (3)b + (4) \\
 + (-3b^6) + (-6b^5) + (-3b^4) \\
 + (15b^5) + (6b^4) + (-23b^3) + (3b^2) + (3b) + (4) \\
 + (15b^5) + (30b^4) + (15b^3) \\
 + (-24b^4) + (-38b^3) + (3b^2) + (3b) + (4) \\
 + (-24b^4) + (-48b^3) + (-24b^2) \\
 + (10b^3) + (27b^2) + (3b) + (4) \\
 + (10b^3) + (20b^2) + (10b) \\
 + (7b^2) + (-7b) + (4)
 \end{array}$$

Coefficient list:

$\{3, -15, 24, -10\}$