4.

Which of the following is the remainder of $-3w^3 - 2w^2 - 3w - 1$ divided by $w - 3$

$$
\begin{array}{r}
\quad\quad +(-3w^2) \quad +(-11w) \quad +(-36) \\
\hline
w-3 \,\big|\, (-3)w^3 \quad +(-2)w^2 \quad +(-3)w \quad +(-1) \\
(-3w^3) \quad +(9w^2) \\
+(-11)w^2 \quad +(-3)w \quad +(-1) \\
+(-11w^2) \quad +(33w) \\
+(-36)w \quad +(-1) \\
+(-36w) \quad +(108) \\
+(-109)
\end{array}
$$