2.

Which of the following is the quotient of $3q^3 - q^2 - 1$ divided by $q - 3$

$$
\begin{array}{r}
+(\boxed{3q^2}) \quad +(\boxed{8q}) \quad +(\boxed{24}) \\
\hline
\boxed{q-3} \quad (3)q^3 \quad +(-1)q^2 \quad\quad +(-1) \\
(\boxed{3q^3}) \quad +(\boxed{-9q^2}) \\
+(8)q^2 \quad\quad +(-1) \\
+(\boxed{8q^2}) \quad +(\boxed{-24q}) \\
+(24)q \quad +(-1) \\
+(\boxed{24q}) \quad +(\boxed{-72}) \\
+(\boxed{71})
\end{array}
$$