5.

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

$$
\begin{array}{r|llll}
 & & +(\boxed{-3f^2}) & +(\boxed{2f}) & +(\boxed{-1}) \\
\hline
\boxed{f+1} & (-3)f^3 & +(-1)f^2 & +(1)f & +(-3) \\
 & (\boxed{-3f^3}) & +(\boxed{-3f^2}) & & \\
 & & +(2)f^2 & +(1)f & +(-3) \\
 & & +(\boxed{2f^2}) & +(\boxed{2f}) & \\
 & & & +(-1)f & +(-3) \\
 & & & +(\boxed{-f}) & +(\boxed{-1}) \\
 & & & & +(\boxed{-2})
\end{array}
$$