

2.

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

$$\begin{array}{r}
 + (\boxed{z^2}) + (\boxed{-2z}) + (\boxed{-3}) \\
 \hline
 \boxed{z-1} + (1)z^3 + (-3)z^2 + (-1)z + (3) \\
 + (\boxed{z^3}) + (\boxed{-z^2}) \\
 + (-2)z^2 + (-1)z + (3) \\
 + (\boxed{-2z^2}) + (\boxed{2z}) \\
 + (-3)z + (3) \\
 + (\boxed{-3z}) + (\boxed{3}) \\
 + (\boxed{0})
 \end{array}$$