

5.

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

$$\begin{array}{r}
 + (\boxed{-z^2}) + (\boxed{-7}) \\
 \hline
 \boxed{z-3} + ()z^2 + () \\
 (\boxed{-z^3}) + (\boxed{3z^2}) \\
 + (-2)z^2 + (-1)z + (1) \\
 + (\boxed{-2z^2}) + (\boxed{6z}) \\
 + (-7)z + (1) \\
 + (\boxed{-7z}) + (\boxed{21}) \\
 + (\boxed{-20})
 \end{array}$$