

3.

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

$$\begin{array}{r}
 \phantom{z + 3} + (z^2) \phantom{+ (-4z)} + (-4z) \phantom{+ 13} \\
 \hline
 z + 3 \quad (1)z^3 + (-1)z^2 + (1)z \\
 \phantom{z + 3} (z^3) + (3z^2) \\
 \phantom{z + 3} + (-4)z^2 + (1)z \\
 \phantom{z + 3} + (-4z^2) + (-12z) \\
 \phantom{z + 3} \phantom{+ (-4z^2)} + (13)z \\
 \phantom{z + 3} \phantom{+ (-4z^2)} + (13z) + (39) \\
 \phantom{z + 3} \phantom{+ (-4z^2)} \phantom{+ (13z)} + (-39)
 \end{array}$$