

5.

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

$$\begin{array}{r}
 \phantom{k+3} + (3k^2) \phantom{+ (-12k)} + (-12k) \phantom{+ (38)} \\
 \hline
 (k+3) \phantom{+ (3k^3)} + (-3k^2) \phantom{+ (2k)} + (3) \\
 \phantom{(k+3)} + (3k^3) \phantom{+ (9k^2)} \\
 \phantom{(k+3)} + (-12k^2) \phantom{+ (2k)} + (3) \\
 \phantom{(k+3)} + (-12k^2) \phantom{+ (-36k)} \\
 \phantom{(k+3)} \phantom{+ (38k)} + (3) \\
 \phantom{(k+3)} \phantom{+ (38k)} + (114) \\
 \phantom{(k+3)} \phantom{+ (38k)} + (-111)
 \end{array}$$