

2.

Which of the following is the remainder of $2n^3 + n^2 + 2$ divided by $n + 3$

$$\begin{array}{r}
 + (\boxed{2n^2}) + (\boxed{-5n}) + (\boxed{15}) \\
 \hline
 \boxed{n+3} (2)n^3 + (1)n^2 + (2) \\
 + (\boxed{2n^3}) + (\boxed{6n^2}) \\
 + (-5)n^2 + (2) \\
 + (\boxed{-5n^2}) + (\boxed{-15n}) \\
 + (15)n + (2) \\
 + (\boxed{15n}) + (\boxed{45}) \\
 + (\boxed{-43})
 \end{array}$$