

5.

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

$$\begin{array}{r}
 + (3a^2) + (-6a) + (16) \\
 \hline
 a+3 \quad (3)a^3 + (3)a^2 + (-2)a + (3) \\
 (3a^3) + (9a^2) \\
 + (-6)a^2 + (-2)a + (3) \\
 + (-6a^2) + (-18a) \\
 + (16)a + (3) \\
 + (16a) + (48) \\
 + (-45)
 \end{array}$$