

3.

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

$$\begin{array}{r}
 + (-k^2) + (4k) + (-10) \\
 \hline
 k+2 \quad (-1)k^3 + (2)k^2 + (-2)k + (3) \\
 (-k^3) + (-2k^2) \\
 + (4)k^2 + (-2)k + (3) \\
 + (4k^2) + (8k) \\
 + (-10)k + (3) \\
 + (-10k) + (-20) \\
 + (23)
 \end{array}$$