

3.

Which of the following is the remainder of  $q^3 + q^2 + 2q - 1$  divided by  $q + 1$

$$\begin{array}{r}
 \phantom{q+1} \phantom{(1)q^3} + (\boxed{q^2}) \phantom{+ (1)q^2} + (\boxed{2}) \phantom{+ (2)q} \\
 \hline
 \boxed{q+1} \phantom{+ (1)q^2} (1)q^3 + (1)q^2 + (2)q + (-1) \\
 \phantom{+ (1)q^2} (\textcircled{q^3}) + (\textcircled{q^2}) \\
 \phantom{+ (1)q^2} \phantom{+ (2)q} + (2)q + (-1) \\
 \phantom{+ (1)q^2} \phantom{+ (2)q} + (\textcircled{2q}) + (\textcircled{2}) \\
 \phantom{+ (1)q^2} \phantom{+ (2)q} \phantom{+ (2)} + (\boxed{-3})
 \end{array}$$