

3.

Which of the following is the Quotient of  $-3m^6 - 12m^5 - 9m^4 + 10m^3 + 8m^2 + 4$  divided by  $(-m - 1)m^2$

$$\begin{array}{r}
 \phantom{(-m-1)m^2} \phantom{(-3)m^6} \phantom{+(-12)m^5} \phantom{+(-9)m^4} + (3m^3) + (9m^2) + (-10) \\
 \hline
 (-m-1)m^2 \phantom{+} (-3)m^6 \phantom{+(-12)m^5} \phantom{+(-9)m^4} + (10)m^3 \phantom{+} (8)m^2 \phantom{+} (4) \\
 \phantom{(-m-1)m^2} (-3m^6) \phantom{+(-12)m^5} \phantom{+(-9)m^4} \phantom{+} (10)m^3 \phantom{+} (8)m^2 \phantom{+} (4) \\
 \phantom{(-m-1)m^2} \phantom{(-3)m^6} + (-9)m^5 \phantom{+(-12)m^5} + (-9)m^4 \phantom{+} (10)m^3 \phantom{+} (8)m^2 \phantom{+} (4) \\
 \phantom{(-m-1)m^2} \phantom{(-3)m^6} + (-9m^5) \phantom{+(-12)m^5} + (-9m^4) \phantom{+} (10)m^3 \phantom{+} (8)m^2 \phantom{+} (4) \\
 \phantom{(-m-1)m^2} \phantom{(-3)m^6} \phantom{+(-9)m^5} \phantom{+(-12)m^5} \phantom{+(-9)m^4} + (10)m^3 \phantom{+} (8)m^2 \phantom{+} (4) \\
 \phantom{(-m-1)m^2} \phantom{(-3)m^6} \phantom{+(-9)m^5} \phantom{+(-12)m^5} \phantom{+(-9)m^4} + (10m^3) + (10m^2) \\
 \phantom{(-m-1)m^2} \phantom{(-3)m^6} \phantom{+(-9)m^5} \phantom{+(-12)m^5} \phantom{+(-9)m^4} \phantom{+} (10m^3) + (-2m^2) + (4)
 \end{array}$$

Coefficient list:

$\{3, 9, 0, -10\}$