

1.

Which of the following is the Quotient of  $-3a^6 - 15a^5 - 21a^4 + a^3 + 19a^2 + 9a + 1$  divided by  $-(-a-2)^2 a$

$$\begin{array}{r}
 \phantom{-(-a-2)^2 a} + (3a^3) + (3a^2) + (-3a) + (-1) \\
 \hline
 -(-a-2)^2 a \quad (-3)a^6 + (-15)a^5 + (-21)a^4 + (1)a^3 + (19)a^2 + (9)a + (1) \\
 \phantom{-(-a-2)^2 a} (-3a^6) + (-12a^5) + (-12a^4) \\
 \phantom{-(-a-2)^2 a} + (-3)a^5 + (-9)a^4 + (1)a^3 + (19)a^2 + (9)a + (1) \\
 \phantom{-(-a-2)^2 a} + (-3a^5) + (-12a^4) + (-12a^3) \\
 \phantom{-(-a-2)^2 a} \phantom{+ (-3)a^5} + (3)a^4 + (13)a^3 + (19)a^2 + (9)a + (1) \\
 \phantom{-(-a-2)^2 a} \phantom{+ (-3)a^5} + (3a^4) + (12a^3) + (12a^2) \\
 \phantom{-(-a-2)^2 a} \phantom{+ (-3)a^5} \phantom{+ (3)a^4} + (1)a^3 + (7)a^2 + (9)a + (1) \\
 \phantom{-(-a-2)^2 a} \phantom{+ (-3)a^5} \phantom{+ (3)a^4} + (a^3) + (4a^2) + (4a) \\
 \phantom{-(-a-2)^2 a} \phantom{+ (-3)a^5} \phantom{+ (3)a^4} \phantom{+ (a^3)} + (3a^2) + (5a) + (1)
 \end{array}$$

Coefficient list:

$\{3, 3, -3, -1\}$