

3.

Which of the following is the Quotient of  $-3y^6 + 21y^4 + 4y^3 - 36y^2 - 21y - 8$  divided by  $-(-y-1)^2 y$

$$\begin{array}{r}
 \phantom{-(-y-1)^2 y} + (3y^3) + (-6y^2) + (-12y) + (26) \\
 \hline
 -(-y-1)^2 y \quad (-3)y^6 \phantom{+ (21)y^4} + (21)y^4 + (4)y^3 + (-36)y^2 + (-21)y + (-8) \\
 \phantom{-(-y-1)^2 y} (-3y^6) + (-6y^5) + (-3y^4) \\
 \phantom{-(-y-1)^2 y} + (6)y^5 + (24)y^4 + (4)y^3 + (-36)y^2 + (-21)y + (-8) \\
 \phantom{-(-y-1)^2 y} + (6y^5) + (12y^4) + (6y^3) \\
 \phantom{-(-y-1)^2 y} + (12)y^4 + (-2)y^3 + (-36)y^2 + (-21)y + (-8) \\
 \phantom{-(-y-1)^2 y} + (12y^4) + (24y^3) + (12y^2) \\
 \phantom{-(-y-1)^2 y} + (-26)y^3 + (-48)y^2 + (-21)y + (-8) \\
 \phantom{-(-y-1)^2 y} + (-26y^3) + (-52y^2) + (-26y) \\
 \phantom{-(-y-1)^2 y} + (4y^2) + (5y) + (-8)
 \end{array}$$

Coefficient list:

$\{3, -6, -12, 26\}$