

2.

Which of the following is the Quotient of $-3y^6 + 9y^5 + 9y^4 - 47y^3 + 21y^2 + 39y - 30$ divided by $(-y - 2)(1 - y)^2$

$$\begin{array}{r}
 + (3y^3) + (-9y^2) + (14) \\
 \hline
 (-y-2)(1-y)^2 \quad (-3)y^6 + (9)y^5 + (9)y^4 + (-47)y^3 + (21)y^2 + (39)y + (-30) \\
 + (-3y^6) + (9y^4) + (-6y^3) \\
 + (9)y^5 + (-41)y^3 + (21)y^2 + (39)y + (-30) \\
 + (9y^5) + (-27y^3) + (18y^2) \\
 + (-14)y^3 + (3)y^2 + (39)y + (-30) \\
 + (-14y^3) + (42y) + (-28) \\
 + (3y^2) + (-3y) + (-2)
 \end{array}$$

Coefficient list:

$\{3, -9, 0, 14\}$