

2.

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

$$\begin{array}{r}
 + (3g^3) + (12g^2) + (15g) + (8) \\
 \hline
 -(1-g)^2g \\
 (-3g^6) + (6g^5) + (-3g^4) \\
 + (-12g^5) + (9g^4) + (10g^3) + (-5g^2) + (-12g) + (-2) \\
 + (-12g^5) + (24g^4) + (-12g^3) \\
 + (-15g^4) + (22g^3) + (-5g^2) + (-12g) + (-2) \\
 + (-15g^4) + (30g^3) + (-15g^2) \\
 + (-8g^3) + (10g^2) + (-12g) + (-2) \\
 + (-8g^3) + (16g^2) + (-8g) \\
 + (-6g^2) + (-4g) + (-2)
 \end{array}$$

Coefficient list:

$\{3, 12, 15, 8\}$