

1.

Which of the following is the Quotient of $-3m^6 + 21m^4 - 8m^3 - 36m^2 + 15m + 2$ divided by $-(-m-2)^2 m$

$$\begin{array}{r}
 + (3m^3) + (-12m^2) + (15m) + (-4) \\
 \hline
 -(-m-2)^2 m \quad (-3)m^6 + (-8)m^3 + (15)m \\
 + (-3m^6) + (-12m^5) + (-12m^4) \\
 + (12)m^5 + (33)m^4 + (-8)m^3 + (-36)m^2 + (15)m + (2) \\
 + (12m^5) + (48m^4) + (48m^3) \\
 + (-15)m^4 + (-56)m^3 + (-36)m^2 + (15)m + (2) \\
 + (-15m^4) + (-60m^3) + (-60m^2) \\
 + (4)m^3 + (24)m^2 + (15)m + (2) \\
 + (4m^3) + (16m^2) + (16m) \\
 + (8m^2) + (-m) + (2)
 \end{array}$$

Coefficient list:

$\{3, -12, 15, -4\}$