

5.

Which of the following is the Quotient of $-3d^6 - 3d^5 + 18d^4 + 10d^3 - 25d^2 + 4d + 8$ divided by $(1-d)d^2$

$$\begin{array}{r}
 + (\boxed{3d^3}) + (\boxed{6d^2}) + (\boxed{-12d}) + (\boxed{-22}) \\
 \hline
 \boxed{(1-d)d^2} \\
 (-3)d^6 + (-3)d^5 + (18)d^4 + (10)d^3 + (-25)d^2 + (4)d + (8) \\
 (\boxed{-3d^6}) + (\boxed{3d^5}) \\
 + (-6)d^5 + (18)d^4 + (10)d^3 + (-25)d^2 + (4)d + (8) \\
 + (\boxed{-6d^5}) + (\boxed{6d^4}) \\
 + (12)d^4 + (10)d^3 + (-25)d^2 + (4)d + (8) \\
 + (\boxed{12d^4}) + (\boxed{-12d^3}) \\
 + (22)d^3 + (-25)d^2 + (4)d + (8) \\
 + (\boxed{22d^3}) + (\boxed{-22d^2}) \\
 + (\boxed{-3d^2}) + (\boxed{4d}) + (\boxed{8})
 \end{array}$$

Coefficient list:

$\{3, 6, -12, -22\}$