

Example: Oblique Non-Linear Asymptote

$$\frac{-3x^4 + 3x^3 + 31x^2 - 26x - 43}{(-x-3)(3-x)}$$

$$\begin{array}{rcl}
 & & + (-3x^2) + (3x) + (4) \\
 \hline
 (-x-3)(3-x) & (-3)x^4 & + (3)x^3 + (31)x^2 + (-26)x + (-43) \\
 & (-3x^4) & + (27x^2) \\
 & & + (3)x^3 + (4)x^2 + (-26)x + (-43) \\
 & + (3x^3) & + (-27x) \\
 & & + (4)x^2 + (1)x + (-43) \\
 & + (4x^2) & + (-36) \\
 & & + (x) + (-7)
 \end{array}$$

