Example: Oblique Non-Linear Asymptote

$$\frac{-3x^4+9x^3+x^2-6x-3}{(1-x)(3-x)}$$

$$+(-3x^2)\quad +(-3x)\quad +(-2)$$

$$(1-x)(3-x)\quad (-3)x^4+(9)x^3+(1)x^2+(-6)x+(-3)$$

$$(-3x^4)+(12x^3)+(-9x^2)$$

$$+(-3)x^3+(10)x^2+(-6)x+(-3)$$

$$+(-3x^3)+(12x^2)+(-9x)$$

$$+(-2)x^2+(3)x+(-3)$$

$$+(-2x^2)+(8x)+(-6)$$

$$+(-5x)+(3)$$