Example: Oblique Non-Linear Asymptote

$$- \frac{-3x^4 - 6x^3 + 25x^2 + 52x + 6}{(-x-3)\,x}$$

$$+ (\boxed{-3x^2}) \quad + (\boxed{3x}) \quad + (\boxed{16})$$

$$\boxed{-(-x-3)\,x} \quad (-3)x^4 \quad + (-6)x^3 \quad + (25)x^2 \quad + (52)x \quad + (6)$$

$$(\boxed{-3x^4}) \quad + (\boxed{-9x^3})$$

$$+ (3)x^3 \quad + (25)x^2 \quad + (52)x \quad + (6)$$

$$+ (\boxed{3x^3}) \quad + (\boxed{9x^2})$$

$$+ (16)x^2 \quad + (52)x \quad + (6)$$

$$+ (\boxed{16x^2}) \quad + (\boxed{48x})$$

$$+ (\boxed{4x}) \quad + (\boxed{6})$$