Example: Oblique Non-Linear Asymptote

$$\frac{-3x^4 + 9x^3 + 19x^2 - 78x + 57}{(-x-3)(2-x)}$$

				$+ (\boxed{-3x^2})$	$+ (\boxed{12x})$	$+ (\boxed{-11})$
$(-x - 3)(2 - x)$	$(-3)x^4$	$+ (9)x^3$	$+ (19)x^2$	$+ (-78)x$	$+ (57)$	
	$(\boxed{-3x^4})$	$+ (\boxed{-3x^3})$	$+ (\boxed{18x^2})$			
		$+ (12)x^3$	$+ (1)x^2$	$+ (-78)x$	$+ (57)$	
		$+ (\boxed{12x^3})$	$+ (\boxed{12x^2})$	$+ (\boxed{-72x})$		
			$+ (-11)x^2$	$+ (-6)x$	$+ (57)$	
			$+ (\boxed{-11x^2})$	$+ (\boxed{-11x})$	$+ (\boxed{66})$	
				$+ (\boxed{5x})$	$+ (\boxed{-9})$	