Advanced Functions · Grade 12

Name _____ Date _____ Score _____ / 5

01 Is $f(x) = 12x^4$ even, odd, or neither? = _____

02 Is $f(x) = -12x^4 + 6x^2 + 6$ even, odd, or neither? = _____

03 Find the vertical and horizontal asymptotes of $f(x) = (x - 1) / (x + 4)$ = _____

04 Describe the end behaviour of $f(x) = -2x^4 - 8x^3 - 10x^2 - 6x + 1$ = _____

05 Is $f(x) = 10x^4 - 4x^2$ even, odd, or neither? = _____

Advanced Functions · Grade 12 (Answer Key)

01 Is f(x) = 12x⁴ even, odd, or neither? = **Even**

02 Is f(x) = −12x⁴ + 6x² + 6 even, odd, or neither? = **Even**

03 Find the vertical and horizontal asymptotes of f(x) = (x − 1) / (x + 4) =

VA: x = -4; HA: y = 1

04 Describe the end behaviour of f(x) = −2x⁴ − 8x³ − 10x² − 6x + 1 =

As x → −∞, f(x) → −∞; as x → +∞, f(x) → −∞.

05 Is f(x) = 10x⁴ − 4x² even, odd, or neither? = **Even**