Advanced Functions · Grade 12

Name _____ Date _____ Score _____ / 5

01

Using the Remainder Theorem, find the remainder when $f(x) = -4x^4 - 6x^2 + 6x - 6$ is divided by $(x) =$

_____

02

Using the Remainder Theorem, find the remainder when $f(x) = 5x^3 + 6x - 2$ is divided by $(x - 4) =$

_____

03

Using the Remainder Theorem, find the remainder when $f(x) = 4x^4 - 4x^3 + 3x^2 + 5x + 5$ is divided by $(x - 4) =$

_____

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

05

Using the Remainder Theorem, find the remainder when $f(x) = -2x^4 - 3x^3$ is divided by $(x - 3) =$

_____

Advanced Functions · Grade 12 (Answer Key)

01

Using the Remainder Theorem, find the remainder when $f(x) = -4x^4 - 6x^2 + 6x - 6$ is divided by $(x) =$

-6

02

Using the Remainder Theorem, find the remainder when $f(x) = 5x^3 + 6x - 2$ is divided by $(x - 4) =$

342

03

Using the Remainder Theorem, find the remainder when $f(x) = 4x^4 - 4x^3 + 3x^2 + 5x + 5$ is divided by $(x - 4) =$

841

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

As $x \to -\infty$, $f(x) \to +\infty$; as $x \to +\infty$, $f(x) \to -\infty$.

05

Using the Remainder Theorem, find the remainder when $f(x) = -2x^4 - 3x^3$ is divided by $(x - 3) =$

-243