Remainder & Factor Theorems · 1

Find the remainder when $f(x) = x^3 + 3x^2 - 4x + 3$ is divided by $(x - 4)$.

4	1	3	-4	3

Remainder & Factor Theorems · 2

Find the remainder when $f(x) = x^3 + 3x^2 - 2x + 3$ is divided by $(x + 3)$.

Remainder & Factor Theorems · 3

Is $(x - 4)$ a factor of $f(x) = -x^3 - 2x^2 - 2x - 2$? Write yes or no.

Remainder & Factor Theorems · 4

Find k so that $(x + 2)$ is a factor of $f(x) = 2x^3 - 4x + k$.

Remainder & Factor Theorems · 5

$(x - 2)$ is a factor of $f(x) = x^3 - 4x^2 + x + 6$. Find the other two zeros.

Remainder & Factor Theorems · 6

Find the remainder when $f(x) = 2x^3 + 4x^2 + 3x - 1$ is divided by $(x + 4)$.

Remainder & Factor Theorems · 7

Is $(x + 3)$ a factor of $f(x) = -x^3 + 3x^2 - x + 3$? Write yes or no.

Remainder & Factor Theorems · 8

Find k so that $(x - 4)$ is a factor of $f(x) = -x^3 - x^2 - 2x + k$.

Remainder & Factor Theorems · 2

ANSWER

9

Remainder & Factor Theorems · 1

ANSWER

99

Remainder & Factor Theorems · 4

ANSWER

8

Remainder & Factor Theorems · 3

ANSWER

no

Remainder & Factor Theorems · 6

ANSWER

-77

Remainder & Factor Theorems · 5

ANSWER

x = 3 or x = -1

Remainder & Factor Theorems · 8

ANSWER

88

Remainder & Factor Theorems · 7

ANSWER

no

Remainder & Factor Theorems · 9

Find the remainder when $f(x) = 2x^3 - 2x + 3$ is divided by $(x + 2)$.

Remainder & Factor Theorems · 10

Is $(x - 2)$ a factor of $f(x) = x^3 + 3x^2 + 7$? Write yes or no.

Remainder & Factor Theorems · 11

Find k so that $(x - 3)$ is a factor of $f(x) = x^3 + 2x + k$.

Remainder & Factor Theorems · 12

$(x + 4)$ is a factor of $f(x) = x^3 + 4x^2 - x - 4$. Find the other two zeros.

Remainder & Factor Theorems · 13

Find the remainder when $f(x) = x^3 + 2x^2 + 5x - 3$ is divided by $(x - 4)$.

Remainder & Factor Theorems · 14

$(x - 3)$ is a factor of $f(x) = x^3 + 7x^2 - 6x - 72$. Find the other two zeros.

Remainder & Factor Theorems · 15

Find k so that $(x + 1)$ is a factor of $f(x) = x^3 - 3x + k$.

Remainder & Factor Theorems · 16

Is $(x - 2)$ a factor of $f(x) = x^3 - 3x^2 - 3x + 10$? Write yes or no.

Remainder & Factor Theorems · 10

ANSWER

no

Remainder & Factor Theorems · 9

ANSWER

-9

Remainder & Factor Theorems · 12

ANSWER

x = 1 or x = -1

Remainder & Factor Theorems · 11

ANSWER

-33

Remainder & Factor Theorems · 14

ANSWER

x = -4 or x = -6

Remainder & Factor Theorems · 13

ANSWER

113

Remainder & Factor Theorems · 16

ANSWER

yes

Remainder & Factor Theorems · 15

ANSWER

-2

Find the remainder when $f(x) = x^3 + 5x^2 - 5x + 2$ is divided by $(x - 2)$.

Is $(x - 4)$ a factor of $f(x) = 2x^4 - 4x^3 - 3x^2 - 5x + 7$? Write yes or no.

Find k so that $(x - 1)$ is a factor of $f(x) = -x^4 + 3x^3 - x^2 - 2x + k$.

$(x - 3)$ is a factor of $f(x) = x^3 - 5x^2 - 18x + 72$. Find the other two zeros.

Find the remainder when $f(x) = x^4 + 3x^3 + 5x^2 + 2x - 4$ is divided by $(x - 1)$.

$(x + 4)$ is a factor of $f(x) = x^3 + 5x^2 + 2x - 8$. Find the other two zeros.

Find k so that $(x + 2)$ is a factor of $f(x) = 3x^3 - 2x + k$.

Is $(x + 3)$ a factor of $f(x) = -x^3 - 4x^2 - 3x + 3$? Write yes or no.

Remainder & Factor Theorems · 18

ANSWER

no

Remainder & Factor Theorems · 17

ANSWER

20

Remainder & Factor Theorems · 20

ANSWER

x = 6 or x = -4

Remainder & Factor Theorems · 19

ANSWER

1

Remainder & Factor Theorems · 22

ANSWER

x = 1 or x = -2

Remainder & Factor Theorems · 21

ANSWER

7

Remainder & Factor Theorems · 24

ANSWER

no

Remainder & Factor Theorems · 23

ANSWER

20