The Rational Root Theorem · 1

According to the Rational Root Theorem, could 9 be a root of $f(x) = 2x^3 + 2x^2 - 4x + 10$? Write yes or no.

The Rational Root Theorem · 2

How many different possible rational roots (counting + and - separately) does the Rational Root Theorem list for $f(x) = 2x^3 + 4x^2 + 7x + 9$?

The Rational Root Theorem · 3

According to the Rational Root Theorem, could $-\frac{8}{5}$ be a root of $f(x) = x^3 - 3x^2 + 5x + 10$? Write yes or no.

The Rational Root Theorem · 4

$f(x) = x^3 - 3x^2 - 5x - 1$ has exactly one rational root. Find it.

The Rational Root Theorem · 5

According to the Rational Root Theorem, could $\frac{3}{2}$ be a root of $f(x) = 3x^3 - x^2 + x + 3$? Write yes or no.

The Rational Root Theorem · 6

How many different possible rational roots (counting + and - separately) does the Rational Root Theorem list for $f(x) = x^3 - 4x^2 + 7x + 4$?

The Rational Root Theorem · 7

$f(x) = x^3 + 3x^2 - 3x - 5$ has exactly one rational root. Find it.

The Rational Root Theorem · 8

According to the Rational Root Theorem, could 1 be a root of $f(x) = x^3 + 3x^2 + 4x + 10$? Write yes or no.

The Rational Root Theorem · 2

ANSWER

12

The Rational Root Theorem · 1

ANSWER

no

The Rational Root Theorem · 4

ANSWER

-1

The Rational Root Theorem · 3

ANSWER

no

The Rational Root Theorem · 6

ANSWER

6

The Rational Root Theorem · 5

ANSWER

no

The Rational Root Theorem · 8

ANSWER

yes

The Rational Root Theorem · 7

ANSWER

-1

The Rational Root Theorem · 9

According to the Rational Root Theorem, could $-\frac{9}{4}$ be a root of $f(x) = 2x^3 - x^2 + x + 15$? Write yes or no.

The Rational Root Theorem · 10

How many different possible rational roots (counting + and - separately) does the Rational Root Theorem list for $f(x) = 3x^3 + 4x^2 - 4x + 4$?

The Rational Root Theorem · 11

According to the Rational Root Theorem, could $-\frac{4}{5}$ be a root of $f(x) = 2x^3 + 3x^2 - 6x - 5$? Write yes or no.

The Rational Root Theorem · 12

$f(x) = x^3 - x^2 - 2x + 8$ has exactly one rational root. Find it.

The Rational Root Theorem · 13

According to the Rational Root Theorem, could -1 be a root of $f(x) = x^3 - 3x^2 + 2x + 3$? Write yes or no.

The Rational Root Theorem · 14

How many different possible rational roots (counting + and - separately) does the Rational Root Theorem list for $f(x) = 3x^3 + 7x^2 + 7x + 9$?

The Rational Root Theorem · 15

$f(x) = 2x^3 + 7x^2 + 12x + 9$ has exactly one rational root. Find it.

The Rational Root Theorem · 16

According to the Rational Root Theorem, could $-\frac{7}{4}$ be a root of $f(x) = x^3 - 6x^2 + 5x + 10$? Write yes or no.

The Rational Root Theorem · 10

ANSWER

12

The Rational Root Theorem · 9

ANSWER

no

The Rational Root Theorem · 12

ANSWER

-2

The Rational Root Theorem · 11

ANSWER

no

The Rational Root Theorem · 14

ANSWER

8

The Rational Root Theorem · 13

ANSWER

yes

The Rational Root Theorem · 16

ANSWER

no

The Rational Root Theorem · 15

ANSWER

$$-\frac{3}{2}$$

The Rational Root Theorem · 17

According to the Rational Root Theorem, could $-\frac{7}{3}$ be a root of $f(x) = 6x^3 - x^2 + 3x + 9$? Write yes or no.

The Rational Root Theorem · 18

How many different possible rational roots (counting + and - separately) does the Rational Root Theorem list for $f(x) = 6x^3 - 7x^2 - 4x - 10$?

The Rational Root Theorem · 19

$f(x) = 4x^3 + 5x^2 + 21x + 5$ has exactly one rational root. Find it.

The Rational Root Theorem · 20

$f(x) = 3x^3 - 17x^2 + 17x + 5$ has exactly one rational root. Find it.

The Rational Root Theorem · 21

According to the Rational Root Theorem, could $-\frac{5}{3}$ be a root of $f(x) = 2x^3 + 4x^2 + 8x + 4$? Write yes or no.

The Rational Root Theorem · 22

How many different possible rational roots (counting + and - separately) does the Rational Root Theorem list for $f(x) = 3x^3 + 4x^2 - 9x + 10$?

The Rational Root Theorem · 23

$f(x) = 3x^3 + 2x^2 + 8x - 3$ has exactly one rational root. Find it.

The Rational Root Theorem · 24

According to the Rational Root Theorem, could $\frac{1}{2}$ be a root of $f(x) = 2x^3 + 5x^2 - 6x + 15$? Write yes or no.

The Rational Root Theorem · 18

ANSWER

24

The Rational Root Theorem · 17

ANSWER

no

The Rational Root Theorem · 20

ANSWER

$$\frac{5}{3}$$

The Rational Root Theorem · 19

ANSWER

$$\frac{1}{-4}$$

The Rational Root Theorem · 22

ANSWER

16

The Rational Root Theorem · 21

ANSWER

no

The Rational Root Theorem · 24

ANSWER

yes

The Rational Root Theorem · 23

ANSWER

$$\frac{1}{3}$$