The Rational Root Theorem · 1

According to the Rational Root Theorem, could $-\frac{8}{5}$ be a root of $f(x) = 4x^3 - 3x^2 + 6x + 10$? 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 $f(x) = 4x^3 - 2x^2 + 15$?

The Rational Root Theorem · 3

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

The Rational Root Theorem · 4

$f(x) = 2x^3 - x^2 + 11x + 6$ has exactly one rational root. Find it.

The Rational Root Theorem · 5

According to the Rational Root Theorem, could $\frac{1}{3}$ be a root of $f(x) = 6x^3 - 4x^2 + 2x + 9$? 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 $f(x) = 2x^3 + x^2 - 2x + 3$?

The Rational Root Theorem · 7

$f(x) = 2x^3 + 9x^2 + 16x + 6$ has exactly one rational root. Find it.

The Rational Root Theorem · 8

According to the Rational Root Theorem, could 3 be a root of $f(x) = 3x^3 + 6x^2 + 4x + 15$? Write yes or no.

The Rational Root Theorem · 2

ANSWER

24

The Rational Root Theorem · 1

ANSWER

no

The Rational Root Theorem · 4

ANSWER

$$\frac{1}{-2}$$

The Rational Root Theorem · 3

ANSWER

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

The Rational Root Theorem · 6

ANSWER

8

The Rational Root Theorem · 5

ANSWER

yes

The Rational Root Theorem · 8

ANSWER

yes

The Rational Root Theorem · 7

ANSWER

$$\frac{1}{-2}$$

The Rational Root Theorem · 9

According to the Rational Root Theorem, could 6 be a root of $f(x) = 4x^3 + 5x^2 - 8x - 10$? 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 $f(x) = 5x^3 + 6x^2 + 2x - 5$?

The Rational Root Theorem · 11

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

The Rational Root Theorem · 12

$f(x) = x^3 - 7x^2 + 18x - 18$ has exactly one rational root. Find it.

The Rational Root Theorem · 13

According to the Rational Root Theorem, could $-\frac{1}{4}$ be a root of $f(x) = 6x^3 - 7x^2 + x + 10$? 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 $f(x) = 5x^3 + 5x^2 + 2x - 12$?

The Rational Root Theorem · 15

$f(x) = 4x^3 + 5x^2 - 30x + 18$ has exactly one rational root. Find it.

The Rational Root Theorem · 16

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

The Rational Root Theorem · 10

ANSWER

6

The Rational Root Theorem · 9

ANSWER

no

The Rational Root Theorem · 12

ANSWER

3

The Rational Root Theorem · 11

ANSWER

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

The Rational Root Theorem · 14

ANSWER

24

The Rational Root Theorem · 13

ANSWER

no

The Rational Root Theorem · 16

ANSWER

yes

The Rational Root Theorem · 15

ANSWER

$$\frac{3}{4}$$

The Rational Root Theorem · 17

According to the Rational Root Theorem, could $-\frac{15}{2}$ be a root of $f(x) = 6x^3 - 4x^2 - 9x + 15$? 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 $f(x) = 3x^3 - 5x^2 - 5$?

The Rational Root Theorem · 19

$f(x) = 2x^3 - 3x^2 - 10x - 4$ has exactly one rational root. Find it.

The Rational Root Theorem · 20

$f(x) = 2x^3 - 3x^2 + 8x - 12$ has exactly one rational root. Find it.

The Rational Root Theorem · 21

According to the Rational Root Theorem, could $\frac{5}{4}$ be a root of $f(x) = 3x^3 + x^2 + 3$? 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 $f(x) = 4x^3 - 3x^2 + 4x + 3$?

The Rational Root Theorem · 23

$f(x) = 3x^3 - 13x^2 + 19x - 5$ has exactly one rational root. Find it.

The Rational Root Theorem · 24

According to the Rational Root Theorem, could $-\frac{5}{3}$ be a root of $f(x) = 5x^3 - 7x^2 + 6x - 12$? Write yes or no.

The Rational Root Theorem · 18

ANSWER

8

The Rational Root Theorem · 17

ANSWER

yes

The Rational Root Theorem · 20

ANSWER

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

The Rational Root Theorem · 19

ANSWER

$$\frac{1}{-2}$$

The Rational Root Theorem · 22

ANSWER

12

The Rational Root Theorem · 21

ANSWER

no

The Rational Root Theorem · 24

ANSWER

no

The Rational Root Theorem · 23

ANSWER

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