The Rational Root Theorem · 1

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

The Rational Root Theorem · 3

$f(x) = 2x^3 + x^2 - 27x + 30$ has exactly one rational root. Find it.

The Rational Root Theorem · 4

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

The Rational Root Theorem · 5

According to the Rational Root Theorem, could -3 be a root of $f(x) = 5x^3 + 7x^2 - 7x + 15$? 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 $f(x) = 6x^3 + 3x^2 - 5x - 10$?

The Rational Root Theorem · 7

$f(x) = 4x^3 + 7x^2 - 6x + 1$ has exactly one rational root. Find it.

The Rational Root Theorem · 8

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

The Rational Root Theorem · 2

ANSWER

16

The Rational Root Theorem · 1

ANSWER

no

The Rational Root Theorem · 4

ANSWER

1

The Rational Root Theorem · 3

ANSWER

$$\frac{5}{2}$$

The Rational Root Theorem · 6

ANSWER

24

The Rational Root Theorem · 5

ANSWER

yes

The Rational Root Theorem · 8

ANSWER

yes

The Rational Root Theorem · 7

ANSWER

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

The Rational Root Theorem · 9

According to the Rational Root Theorem, could $\frac{7}{2}$ be a root of $f(x) = 2x^3 - x^2 - x + 6$? 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 $f(x) = 4x^3 - x^2 + 7x + 8$?

The Rational Root Theorem · 11

$f(x) = 2x^3 + 5x^2 - 15x + 6$ has exactly one rational root. Find it.

The Rational Root Theorem · 12

$f(x) = 3x^3 + 10x^2 + 7x - 10$ 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 $f(x) = 4x^3 - 7x^2 - 5x + 9$? 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 $f(x) = 3x^3 + 7x + 15$?

The Rational Root Theorem · 15

$f(x) = 4x^3 - 17x^2 + 35x - 25$ has exactly one rational root. Find it.

The Rational Root Theorem · 16

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

The Rational Root Theorem · 10

ANSWER

12

The Rational Root Theorem · 9

ANSWER

no

The Rational Root Theorem · 12

ANSWER

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

The Rational Root Theorem · 11

ANSWER

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

The Rational Root Theorem · 14

ANSWER

12

The Rational Root Theorem · 13

ANSWER

yes

The Rational Root Theorem · 16

ANSWER

yes

The Rational Root Theorem · 15

ANSWER

$$\frac{5}{4}$$

The Rational Root Theorem · 17

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

The Rational Root Theorem · 19

$f(x) = 2x^3 + 3x^2 + x + 15$ has exactly one rational root. Find it.

The Rational Root Theorem · 20

$f(x) = 2x^3 - 5x^2 - 7x - 2$ has exactly one rational root. Find it.

The Rational Root Theorem · 21

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

The Rational Root Theorem · 23

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

The Rational Root Theorem · 24

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

The Rational Root Theorem · 18

ANSWER

16

The Rational Root Theorem · 17

ANSWER

no

The Rational Root Theorem · 20

ANSWER

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

The Rational Root Theorem · 19

ANSWER

$$\frac{5}{-2}$$

The Rational Root Theorem · 22

ANSWER

12

The Rational Root Theorem · 21

ANSWER

yes

The Rational Root Theorem · 24

ANSWER

no

The Rational Root Theorem · 23

ANSWER

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