

Determine the leading coefficient of a polynomial function

1

Which function has this power and coefficient?

A $f(x) = -3x^7 - 4x^6 - 4x^5$

B $f(x) = -3x^6 - 4x^5 - 4x^4$

2Valid rational roots are in the form p/q where q must be a factor of the leading coefficient. What is the leading coefficient in this polynomial?

$$f(x) = 2x^4 - 6x^3 - 28x^2 + 96x - 64$$

A 2

B -28

C -6

D 96

3

What is the highest power and leading coefficient of this function?

$$f(x) = 4x - 4$$

A
highest power = 1
leading coefficient = -4

B
highest power = 1
leading coefficient = 4

4Valid rational roots are in the form p/q where q must be a factor of the leading coefficient. What is the leading coefficient in this polynomial?

$$f(x) = -4x^2 - 10x + 12 + 2x^3$$

A 12

B -4

C -10

D 2

5Valid rational roots are in the form p/q where q must be a factor of the leading coefficient. What is the leading coefficient in this polynomial?

$$f(x) = 4x^4 - 20x^3 + 36x^2 - 28x + 8$$

A 36

B -20

C -28

D 4

6

What is the highest power and leading coefficient of this function?

$$f(x) = 3x^4 - 5x^3 - 5x^2$$

A
highest power = 5
leading coefficient = 3

B
highest power = 4
leading coefficient = 3

7Valid rational roots are in the form p/q where q must be a factor of the leading coefficient. What is the leading coefficient in this polynomial?

$$f(x) = -16x + 4x^3 - 8x^2 + 32$$

A 32

B -8

C 4

D -16

8Valid rational roots are in the form p/q where q must be a factor of the leading coefficient. What is the leading coefficient in this polynomial?

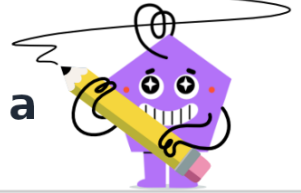
$$f(x) = 2x^5 - 10x^4 + 6x^3 + 26x^2 - 16x - 24$$

A 2

B 26

C -10

D 6



Determine the leading coefficient of a polynomial function

9

What is the highest power and leading coefficient of this function?

$$f(x) = -5x^3 + 2x^2 + 2x$$

A

highest power = 3
leading coefficient = 5

B

highest power = 3
leading coefficient = -5

10

Valid rational roots are in the form p/q where q must be a factor of the leading coefficient. What is the leading coefficient in this polynomial?

$$f(x) = -2x^2 - 16 + 2x^3 - 20x$$

A

-16

B

-20

C

-2

D

2

11

Valid rational roots are in the form p/q where q must be a factor of the leading coefficient. What is the leading coefficient in this polynomial?

$$f(x) = 5x^4 + 30x^3 + 35x^2 - 30x - 40$$

A

35

B

30

C

5

D

-30

12

What is the highest power and leading coefficient of this function?

$$f(x) = 3x^2 + 4x + 4$$

A

highest power = 1
leading coefficient = 3

B

highest power = 2
leading coefficient = 3