



Classify polynomials by degree

1

Simplify by combining like terms.

$$9x - 1 + 4x^2 - x$$

A $4x^2 + 8x - 1$

B $4x^2 + 9x - x - 1$

C $4x^2 + 9x - 1$

D $4x^2 + 10x - 1$

2

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

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

A
highest power = 5
leading coefficient = -5

B
highest power = 4
leading coefficient = -5

3

Simplify by combining like terms.

$$6x^2 + 9x^2 - 8x^3 - 4 + 4x^4$$

A $4x^4 - 8x^3 + 15x^2 - 4$

B $4x^4 - 8x^3 + 6x^2 - 4$

C $4x^4 - 8x^3 - 3x^2 - 4$

D $4x^4 - 8x^3 + 6x^2 + 9x^2 - 4$

4

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

5

Simplify by combining like terms.

$$-3x^4 - x^3 - 2x^2 - 3x^4 + 3x$$

A $-6x^4 - x^3 - 2x^2 + 3x$

B $-3x^4 - 3x^4 - x^3 - 2x^2 + 3x$

C $0x^4 - x^3 - 2x^2 + 3x$

D $-3x^4 - x^3 - 2x^2 + 3x$

6

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

$$f(x) = 5x^5 + 5x^4 + 5x^3$$

A
highest power = 5
leading coefficient = -5

B
highest power = 5
leading coefficient = 5

7

Simplify by combining like terms.

$$2x^2 + 9x + 4x^3 - 6x + 9x^4$$

A $9x^4 + 4x^3 + 2x^2 + 9x - 6x$

B $9x^4 + 4x^3 + 2x^2 + 9x$

C $9x^4 + 4x^3 + 2x^2 + 15x$

D $9x^4 + 4x^3 + 2x^2 + 3x$

8

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

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

A
highest power = 5
leading coefficient = -4

B
highest power = 4
leading coefficient = -4



Classify polynomials by degree

9

Simplify by combining like terms.

$$-4x^2 - 4x^3 + 2x^3 + 6x - 6$$

A $-4x^3 - 4x^2 + 6x - 6$

B $-4x^3 + 2x^3 - 4x^2 + 6x - 6$

C $-6x^3 - 4x^2 + 6x - 6$

D $-2x^3 - 4x^2 + 6x - 6$

10

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

$$f(x) = -5x^7 + 5x^6 + 5x^5$$

A

highest power = 7
leading coefficient = -5

B

highest power = 7
leading coefficient = 5**11**

Simplify by combining like terms.

$$-7x^3 + 6x^2 + 9 - 6x + x^2$$

A $-7x^3 + 5x^2 - 6x + 9$

B $-7x^3 + 7x^2 - 6x + 9$

C $-7x^3 + 6x^2 - 6x + 9$

D $-7x^3 + 6x^2 + x^2 - 6x + 9$

12

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

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

A

highest power = 1
leading coefficient = -3

B

highest power = 1
leading coefficient = 3