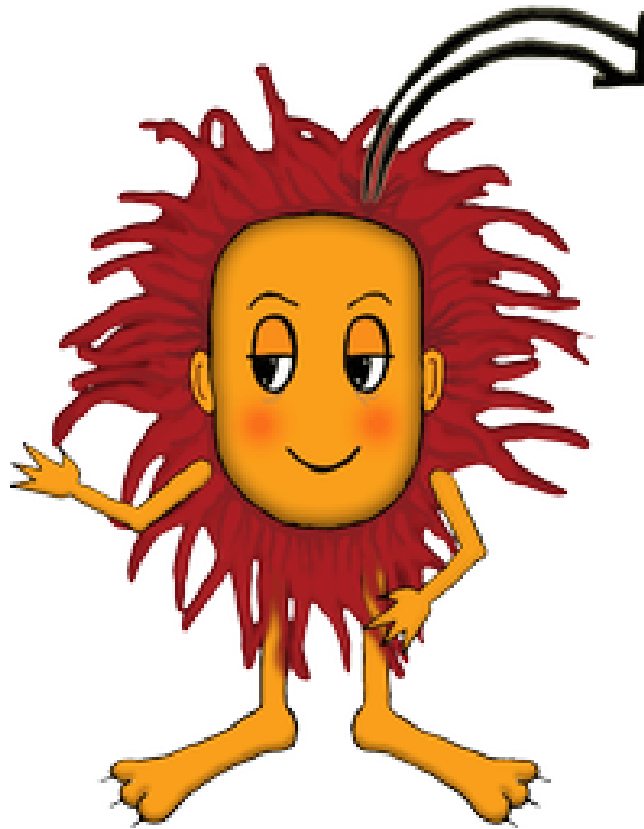


Velika logična pošast



Operacije z enočleniki

Dana sta izraza A in B .

Izračunaj $A+B$, $A-B$, $A \times B$ in $A:B$.

Pri vsoti in razliki izpostavi skupne faktorje.

1.

A	B	$A + B$	$A - B$	$A \times B$	$A : B$
$6x^3y^4$	$10y^4$				
$-2x^2y$	$-5x^2y^2$				
$-9xy^3$	$-5y^4$				
$-5x^3y$	$8x^2y^2$				
$11x^3y^3$	$-4x^2y^3$				
$-3x^3y^3$	$-11xy$				
$8y^2$	$6x^4y^2$				
$12xy^2$	$11y$				
$2x^4y^4$	$-7xy^3$				
$10x^2y$	$10xy^2$				

2.

A	B	$A + B$	$A - B$	$A \times B$	$A : B$
$-8y^2$	$6y^2$				
$7x^4y^2$	$7x^2y^3$				
$4y^3$	$9y^4$				
$-4x^4y$	$7x^2y$				
y	$3y$				
$5y$	x^4y^2				
$10x^4y$	$-x^4y^4$				
$-5y$	$-9x^3y^2$				
$3x^4y^2$	$5x^2y^2$				
$-3y^2$	$-6x^2y^4$				

3.

A	B	$A + B$	$A - B$	$A \times B$	$A : B$
$9xy^4$	$-12x^3y^3$				
$-6y^3$	$-12x^4y^4$				
$-x^2y^3$	$8y^4$				
$9y^4$	$-5x^3y^4$				
x^4y^4	$6y^4$				
$7x^2y$	$-xy^3$				
$-10x^3y^4$	$11x^4y^4$				
$-10xy^3$	$-8x^2y^2$				
$-6y^3$	$-8x^4y^3$				
$-7y^4$	$8y$				

4.

A	B	$A + B$	$A - B$	$A \times B$	$A : B$
$-9x^3y^2$	x^2y^3				
$-x^3y$	$10y^4$				
y^4	$12x^3y^4$				
$12xy^2$	$-4xy$				
$-7y^2$	$-8y^4$				
$-6y$	$6x^2y^4$				
$4x^2y^4$	$2x^3y$				
$-6y^4$	$-8x^3y^2$				
$2x^2y^4$	$-2y$				
$11x^4y^2$	$-3x^2y$				

5.

A	B	$A + B$	$A - B$	$A \times B$	$A : B$
$-3x^3y^2$	$-9x^4y^2$				
$-9x^4y$	$10xy^4$				
$2x^4y^3$	$-2xy^2$				
$-5xy$	$8y$				
$-4x^2y^3$	$10x^2y^2$				
$-5x^4y^2$	$5y^4$				
$7x^3y$	y^2				
$4x^3y^3$	$-4xy^3$				
$-11xy$	$-4x^4y^2$				
$10xy$	$11x^2y$				

6.

A	B	$A + B$	$A - B$	$A \times B$	$A : B$
$10x^3y^4$	$11y$				
$11x^4y$	$11x^3y^4$				
$10x^4y^3$	$-x^2y$				
$-3x^3y^4$	$-12x^2y^4$				
$8x^2y^2$	$10x^3y^2$				
$-10xy$	x^3y^2				
$-8x^3y^2$	$-x^3y$				
$10x^2y$	$11xy^3$				
$12x^3y^4$	$10y^3$				
$-10y^2$	$-11x^2y^2$				

7.

A	B	$A + B$	$A - B$	$A \times B$	$A : B$
$-5x^3y^3$	$9x^3y^4$				
$7x^4y^4$	$5x^4y^3$				
$12x^2y^4$	$12x^3y$				
$-3xy^2$	$10x^3y^4$				
$-5y^2$	$9x^4y^3$				
$4x^2y^2$	$10y^2$				
$10x^4y^2$	$-11y^2$				
$-10y^2$	$-3y^4$				
$-7y^4$	$-6x^4y^3$				
$-2x^4y^3$	$4x^4y^3$				

8.

A	B	$A + B$	$A - B$	$A \times B$	$A : B$
$11y$	$11x^2y^2$				
$-x^4y$	$-5y^4$				
$-6xy$	$-4y^4$				
$10x^3y$	$-5x^4y^2$				
$-4y^4$	$-11x^2y^2$				
$6xy$	$-8xy^4$				
$-x^4y^2$	$6xy$				
$-x^2y$	$-12x^2y$				
$-12x^2y^2$	$5x^4y^3$				
$10x^2y^3$	$-12x^4y$				

9.

A	B	$A + B$	$A - B$	$A \times B$	$A : B$
$11x^2y$	y^3				
$4x^3y^2$	$-7x^3y^2$				
$12x^3y$	$-7y$				
$2y^2$	$11y^2$				
$-7x^2y^2$	$2x^3y$				
$-xy$	$-7x^2y^4$				
$3x^2y^2$	$-6x^4y^4$				
$-9x^3y^3$	$2x^3y^4$				
$3y^2$	$-8xy^3$				
$-5x^3y$	$-12x^2y^2$				

10.

A	B	$A + B$	$A - B$	$A \times B$	$A : B$
$-9x^4y$	$-8x^2y^3$				
$9y^3$	$-12x^3y^2$				
$3x^4y^4$	$4xy$				
$-x^4y^3$	$6x^4y^2$				
$-5x^3y^2$	$-12y$				
$9x^2y^2$	$8x^2y^2$				
$3xy^3$	$3x^2y$				
$-7x^3y^4$	$6x^3y^2$				
$-3x^3y^3$	$-10x^2y$				
$-12x^4y^2$	$-10x^4y^4$				

11.

A	B	$A + B$	$A - B$	$A \times B$	$A : B$
$-10x^3y^3$	$9xy^4$				
$8y^2$	$10x^2y^3$				
$-11x^3y$	$-6x^3y^4$				
$-11x^4y^2$	$-y^4$				
$-9x^2y^3$	$-2x^3y^3$				
$-6x^2y^4$	$-5y$				
$-3x^4y^2$	$-6x^4y^4$				
$9y^2$	$-12x^3y^3$				
$2y^4$	$-5xy^2$				
$10xy^3$	$3y^3$				

12.

A	B	$A + B$	$A - B$	$A \times B$	$A : B$
$-8xy^3$	$6y^3$				
$-8x^2y^4$	$9y^3$				
$9x^4y^2$	x^2y^4				
$9x^2y^3$	$-6y$				
$4x^4y^2$	$12xy^4$				
$-10x^2y^2$	$12xy$				
$-11x^2y$	$-2xy^2$				
$-8x^4y^2$	$8x^2y^2$				
$-6y^3$	$5x^4y$				
$3x^2y^4$	$3x^2y$				

13.

A	B	$A + B$	$A - B$	$A \times B$	$A : B$
$8x^3y^2$	$11xy^3$				
$-8x^2y^3$	$10y^2$				
$7x^3y^2$	$-x^4y^3$				
$-8xy^4$	$-3x^4y^4$				
$-2xy^2$	$-5x^2y^4$				
$5x^4y^4$	$-3xy^2$				
$-10x^4y$	$-3x^3y^2$				
xy	$-8x^2y$				
$-x^4y^2$	$-6x^2y^3$				
$5xy^2$	$7x^2y^4$				

14.

A	B	$A + B$	$A - B$	$A \times B$	$A : B$
$5x^3y^2$	$-6x^2y^2$				
$-11x^4y^4$	$-11x^2y$				
$12x^4y^3$	$-9xy^2$				
$11x^4y^2$	$2x^3y^3$				
$3x^4y^4$	$11x^3y^2$				
xy^4	$-11y^3$				
$-4x^2y^2$	$-5x^3y$				
$7x^2y^2$	$4y^4$				
$-6xy^2$	$-9y^3$				
$3x^3y^3$	$-11xy^3$				

15.

A	B	$A + B$	$A - B$	$A \times B$	$A : B$
$-12x^4y$	y^3				
$2x^2y^3$	$2x^4y$				
$11x^2y$	$-8y^4$				
$6x^2y^2$	$3y$				
$-2x^4y^4$	$-3xy$				
$-12y^3$	$10x^3y^3$				
$-5x^4y^3$	$-2x^4y$				
$6x^2y^4$	$-4x^3y^3$				
$12x^2y^2$	$2x^3y$				
$-x^4y^3$	$-11x^3y^3$				

16.

A	B	$A + B$	$A - B$	$A \times B$	$A : B$
$-9x^3y^4$	$-xy^4$				
$-2x^2y$	$9x^4y$				
$-2xy^3$	$7x^4y^2$				
x^4y^2	y^2				
$10x^2y^3$	$-5y^4$				
$3xy^2$	$-6x^4y^3$				
$11x^2y$	$-12x^4y^2$				
$8x^3y^4$	$-5x^3y$				
$3x^4y^2$	$5x^4y^4$				
$3y^4$	$9y^2$				

17.

A	B	$A + B$	$A - B$	$A \times B$	$A : B$
$-5y^4$	$-11x^2y^2$				
$-3xy^2$	$12y^2$				
$3x^3y^2$	$-12x^4y^3$				
$-11x^4y^3$	$6x^4y^3$				
$-11x^4y$	$7x^3y^2$				
$-12x^4y^3$	$12x^3y^2$				
$5xy^2$	$-xy^4$				
$-2xy^2$	$3xy^3$				
$7x^4y^2$	$-9x^4y^4$				
$-5y^4$	$2x^3y$				

18.

A	B	$A + B$	$A - B$	$A \times B$	$A : B$
$-2y$	y^4				
$-y^4$	$-3x^3y^4$				
$2y^3$	$-12x^4y$				
$-7xy$	$-10x^2y^2$				
$-9x^2y^2$	$6y$				
$-11xy$	$-6x^2y^4$				
x^3y^3	$9x^3y^2$				
$9xy^2$	$2xy^3$				
$-6x^4y$	$6x^2y^4$				
$12x^2y^2$	$-5x^3y$				

19.

A	B	$A + B$	$A - B$	$A \times B$	$A : B$
$-10x^4y^3$	$-8x^2y$				
$-12x^2y$	$-6y^3$				
$3x^4y^2$	$-3x^3y^2$				
$-7x^4y^3$	$8x^4y^3$				
$3xy$	$-x^4y^3$				
$10x^3y^3$	$2xy^4$				
$-4x^4y$	$-4x^2y$				
$12x^3y^3$	$-6y^2$				
$10y$	$12xy^2$				
$11y^4$	$7y^4$				

20.

A	B	$A + B$	$A - B$	$A \times B$	$A : B$
$12xy$	$-5x^2y^2$				
$8x^3y^2$	$-5x^3y^4$				
$-5y$	$-4x^3y$				
$-7x^2y^2$	$-4x^3y^2$				
$-9xy$	$-11x^2y^3$				
$3xy^4$	$-10xy^2$				
$10x^2y$	$6x^4y^3$				
$-12y^3$	$5x^2y$				
$-2x^3y^3$	$11x^4y^2$				
$-7xy^4$	$-7x^3y$				

21.

A	B	$A + B$	$A - B$	$A \times B$	$A : B$
$10x^3y^2$	$-x^2y^2$				
$4xy^4$	$-9xy$				
$2x^4y^3$	$5xy^4$				
$2y$	$9xy$				
$4x^3y^4$	$-10x^3y^4$				
$6y^2$	$5x^4y^4$				
$6x^2y^2$	$-5x^4y^4$				
$-12x^2y^4$	$3x^2y^4$				
$-7xy^2$	$-4x^3y^4$				
$9x^2y$	$6xy^2$				

22.

A	B	$A + B$	$A - B$	$A \times B$	$A : B$
$-8xy^2$	$10x^2y^2$				
$-3x^2y$	$5x^2y$				
$-8x^3y^4$	$5x^4y^3$				
$-8y^4$	$2y$				
$-12x^2y^4$	$12y^4$				
$-x^3y^3$	$5x^4y^2$				
$-2y^4$	$6y^3$				
$6x^4y^3$	$9y^2$				
$-4x^2y^4$	$9x^2y^4$				
$7x^3y^3$	$6y^3$				

23.

A	B	$A + B$	$A - B$	$A \times B$	$A : B$
$2x^3y^3$	$7x^2y$				
$-9xy^4$	$-8x^4y^2$				
$-6x^3y$	$-8x^3y^3$				
$-9x^3y$	$-10x^4y^4$				
$-9x^3y^3$	$-7x^2y$				
$7y^2$	$-11x^4y^3$				
$-x^3y^2$	$-9x^3y^4$				
$-y^3$	$-11xy^4$				
$10x^4y^4$	$8x^4y^4$				
$11y^4$	$-3x^2y^2$				

24.

A	B	$A + B$	$A - B$	$A \times B$	$A : B$
$2x^3y^3$	$-9xy^4$				
$9x^2y^3$	$-x^2y^4$				
$10x^4y^3$	$-7x^4y^4$				
$-10y^2$	$-y^4$				
$-6y$	$12y^3$				
$-11y$	$5xy^2$				
$-12xy$	$-10x^2y^4$				
$2y^4$	$4y^4$				
$-11y^3$	$11x^3y^2$				
$4x^3y$	$9x^4y^3$				

25.

A	B	$A + B$	$A - B$	$A \times B$	$A : B$
$-12x^3y$	$7xy^3$				
$5x^4y^4$	$8x^2y$				
$-x^3y^4$	$12x^4y^2$				
$-3x^2y$	$5y^2$				
$2x^4y^2$	xy^2				
$-5y^3$	$-3xy^3$				
$6y$	$-8xy^2$				
$-12xy^4$	xy				
$9y^3$	$-4x^2y$				
$2x^4y^3$	$-8xy^4$				

26.

A	B	$A + B$	$A - B$	$A \times B$	$A : B$
$-3x^4y^3$	$-8y^3$				
$-3x^3y$	$12xy^4$				
$3y^2$	$4x^4y$				
$-4x^3y^4$	$-4x^2y^2$				
$-4x^3y^3$	$-4x^4y^2$				
$-6x^3y$	$-x^3y^3$				
$-7x^4y$	$-10xy^4$				
$7xy^2$	$4xy^3$				
$-3xy^2$	$6x^3y^4$				
$4xy^3$	$6x^2y$				

27.

A	B	$A + B$	$A - B$	$A \times B$	$A : B$
$3x^4y$	$-6xy^4$				
$2xy$	$-7x^3y$				
$-6x^4y^3$	$4xy^2$				
$-3x^3y^4$	$4x^3y^4$				
$11xy$	$7xy^3$				
$12x^3y^2$	$-2x^2y^3$				
$-6x^3y^2$	$6x^3y^2$				
$-9x^2y^4$	$-x^3y$				
$3x^2y^4$	$-4x^4y$				
$9xy^2$	$2x^4y^2$				

28.

A	B	$A + B$	$A - B$	$A \times B$	$A : B$
xy^2	$10x^3y$				
$6x^3y^4$	$-7x^2y$				
$10xy$	$9xy^4$				
$-4x^3y$	$-3x^3y^4$				
$-8xy^3$	$-11x^3y^3$				
$-10x^4y^2$	x^2y^4				
$-6y$	$5x^4y^2$				
$-4x^4y^2$	$9xy$				
$-5x^4y^2$	$-xy^4$				
$-y^3$	$-12x^4y$				

29.

A	B	$A + B$	$A - B$	$A \times B$	$A : B$
$-3x^2y^3$	$-xy^2$				
$-11xy^2$	$-4xy^4$				
$-8x^3y$	$6xy$				
$-3y^3$	$5y^4$				
$-11x^4y$	$-6x^2y^2$				
$2x^3y^4$	$5x^4y^2$				
$-10y^2$	$-6x^3y^3$				
$7x^4y^3$	$-8xy^4$				
$7x^3y^2$	$-4x^4y^2$				
$4x^2y$	xy^2				

30.

A	B	$A + B$	$A - B$	$A \times B$	$A : B$
$-12xy^3$	$5x^4y^3$				
$-11y^2$	$-y$				
$6x^2y$	$8x^4y^2$				
$-12x^2y$	$5x^4y^3$				
$11y^2$	$8x^2y$				
$-9xy^2$	$-4xy^4$				
$-11x^2y^3$	$7x^4y^2$				
$11x^4y$	$-12x^3y$				
$-9y^3$	$-10y^2$				
$-x^3y^2$	$-6x^3y^3$				

Rešitve:

1.

A	B	A + B	A - B	A × B	A : B
$6x^3y^4$	$10y^4$	$2(3x^3 + 5)y^4$	$2(3x^3 - 5)y^4$	$60x^3y^8$	$\frac{3x^3}{5}$
$-2x^2y$	$-5x^2y^2$	$-x^2y(5y + 2)$	$x^2y(5y - 2)$	$10x^4y^3$	$\frac{2}{5y}$
$-9xy^3$	$-5y^4$	$-y^3(9x + 5y)$	$y^3(-9x - 5y)$	$45xy^7$	$\frac{9x}{5y}$
$-5x^3y$	$8x^2y^2$	$-x^2y(5x - 8y)$	$-x^2y(5x + 8y)$	$-40x^5y^3$	$-\frac{5x}{8y}$
$11x^3y^3$	$-4x^2y^3$	$x^2(11x - 4)y^3$	$x^2(11x + 4)y^3$	$-44x^5y^6$	$-\frac{11x}{4}$
$-3x^3y^3$	$-11xy$	$-xy(3x^2y^2 + 11)$	$-xy(3x^2y^2 - 11)$	$33x^4y^4$	$\frac{3x^2y^2}{11}$
$8y^2$	$6x^4y^2$	$2(3x^4 + 4)y^2$	$-2(3x^4 - 4)y^2$	$48x^4y^4$	$\frac{4}{3x^4}$
$12xy^2$	$11y$	$y(12xy + 11)$	$y(12xy - 11)$	$132xy^3$	$\frac{12xy}{11}$
$2x^4y^4$	$-7xy^3$	$xy^3(2x^3y - 7)$	$xy^3(2x^3y + 7)$	$-14x^5y^7$	$-\frac{2x^3y}{7}$
$10x^2y$	$10xy^2$	$10xy(x + y)$	$10xy(x - y)$	$100x^3y^3$	$\frac{x}{y}$

2.

A	B	A + B	A - B	A × B	A : B
$-8y^2$	$6y^2$	$-2y^2$	$-14y^2$	$-48y^4$	$-\frac{4}{3}$
$7x^4y^2$	$7x^2y^3$	$7x^2y^2(x^2 + y)$	$7x^2y^2(x^2 - y)$	$49x^6y^5$	$\frac{x^2}{y}$
$4y^3$	$9y^4$	$y^3(9y + 4)$	$-y^3(9y - 4)$	$36y^7$	$\frac{4}{9y}$
$-4x^4y$	$7x^2y$	$-x^2(4x^2 - 7)y$	$-x^2(4x^2 + 7)y$	$-28x^6y^2$	$-\frac{4x^2}{7}$
y	$3y$	$4y$	$-2y$	$3y^2$	$\frac{1}{3}$
$5y$	x^4y^2	$y(x^4y + 5)$	$-y(x^4y - 5)$	$5x^4y^3$	$\frac{5}{x^4y}$
$10x^4y$	$-x^4y^4$	$-x^4y(y^3 - 10)$	$x^4y(y^3 + 10)$	$-10x^8y^5$	$-\frac{10}{y^3}$
$-5y$	$-9x^3y^2$	$-y(9x^3y + 5)$	$y(9x^3y - 5)$	$45x^3y^3$	$\frac{5}{9x^3y}$
$3x^4y^2$	$5x^2y^2$	$x^2(3x^2 + 5)y^2$	$x^2(3x^2 - 5)y^2$	$15x^6y^4$	$\frac{3x^2}{5}$
$-3y^2$	$-6x^2y^4$	$-3y^2(2x^2y^2 + 1)$	$3y^2(2x^2y^2 - 1)$	$18x^2y^6$	$\frac{1}{2x^2y^2}$

3.

A	B	A + B	A - B	A × B	A : B
$9xy^4$	$-12x^3y^3$	$-3xy^3(4x^2 - 3y)$	$3xy^3(4x^2 + 3y)$	$-108x^4y^7$	$-\frac{3y}{4x^2}$
$-6y^3$	$-12x^4y^4$	$-6y^3(2x^4y + 1)$	$6y^3(2x^4y - 1)$	$72x^4y^7$	$\frac{1}{2x^4y}$
$-x^2y^3$	$8y^4$	$y^3(-(x^2 - 8y))$	$-y^3(x^2 + 8y)$	$-8x^2y^7$	$-\frac{x^2}{8y}$
$9y^4$	$-5x^3y^4$	$-(5x^3 - 9)y^4$	$(5x^3 + 9)y^4$	$-45x^3y^8$	$-\frac{9}{5x^3}$
x^4y^4	$6y^4$	$(x^4 + 6)y^4$	$(x^4 - 6)y^4$	$6x^4y^8$	$\frac{x^4}{6}$
$7x^2y$	$-xy^3$	$xy(7x - y^2)$	$xy(7x + y^2)$	$-7x^3y^4$	$-\frac{7x}{y^2}$
$-10x^3y^4$	$11x^4y^4$	$x^3(11x - 10)y^4$	$-x^3(11x + 10)y^4$	$-110x^7y^8$	$-\frac{10}{11x}$
$-10xy^3$	$-8x^2y^2$	$-2xy^2(4x + 5y)$	$2xy^2(4x - 5y)$	$80x^3y^5$	$\frac{5y}{4x}$
$-6y^3$	$-8x^4y^3$	$-2(4x^4 + 3)y^3$	$2(4x^4 - 3)y^3$	$48x^4y^6$	$\frac{3}{4x^4}$
$-7y^4$	$8y$	$-y(7y^3 - 8)$	$-y(7y^3 + 8)$	$-56y^5$	$-\frac{7y^3}{8}$

4.

A	B	A + B	A - B	A × B	A : B
$-9x^3y^2$	x^2y^3	$-x^2y^2(9x - y)$	$-x^2y^2(9x + y)$	$-9x^5y^5$	$-\frac{9x}{y}$
$-x^3y$	$10y^4$	$-y(x^3 - 10y^3)$	$-y(x^3 + 10y^3)$	$-10x^3y^5$	$-\frac{x^3}{10y^3}$
y^4	$12x^3y^4$	$(12x^3 + 1)y^4$	$-(12x^3 - 1)y^4$	$12x^3y^8$	$\frac{1}{12x^3}$
$12xy^2$	$-4xy$	$4xy(3y - 1)$	$4xy(3y + 1)$	$-48x^2y^3$	$-3y$
$-7y^2$	$-8y^4$	$-y^2(8y^2 + 7)$	$y^2(8y^2 - 7)$	$56y^6$	$\frac{7}{8y^2}$
$-6y$	$6x^2y^4$	$6y(x^2y^3 - 1)$	$-6y(x^2y^3 + 1)$	$-36x^2y^5$	$-\frac{1}{x^2y^3}$
$4x^2y^4$	$2x^3y$	$2x^2y(x + 2y^3)$	$-2x^2y(x - 2y^3)$	$8x^5y^5$	$\frac{2y^3}{x}$
$-6y^4$	$-8x^3y^2$	$-2y^2(4x^3 + 3y^2)$	$2y^2(4x^3 - 3y^2)$	$48x^3y^6$	$\frac{3y^2}{4x^3}$
$2x^2y^4$	$-2y$	$2y(x^2y^3 - 1)$	$2y(x^2y^3 + 1)$	$-4x^2y^5$	$-x^2y^3$
$11x^4y^2$	$-3x^2y$	$x^2y(11x^2y - 3)$	$x^2y(11x^2y + 3)$	$-33x^6y^3$	$-\frac{11x^2y}{3}$

5.

A	B	A + B	A - B	A × B	A : B
$-3x^3y^2$	$-9x^4y^2$	$-3x^3(3x+1)y^2$	$3x^3(3x-1)y^2$	$27x^7y^4$	$\frac{1}{3x}$
$-9x^4y$	$10xy^4$	$-xy(9x^3-10y^3)$	$-xy(9x^3+10y^3)$	$-90x^5y^5$	$-\frac{9x^3}{10y^3}$
$2x^4y^3$	$-2xy^2$	$2xy^2(x^3y-1)$	$2xy^2(x^3y+1)$	$-4x^5y^5$	$-x^3y$
$-5xy$	$8y$	$-(5x-8)y$	$-(5x+8)y$	$-40xy^2$	$-\frac{5x}{8}$
$-4x^2y^3$	$10x^2y^2$	$-2x^2y^2(2y-5)$	$-2x^2y^2(2y+5)$	$-40x^4y^5$	$-\frac{2y}{5}$
$-5x^4y^2$	$5y^4$	$-5y^2(x^2-y)(x^2+y)$	$-5y^2(x^4+y^2)$	$-25x^4y^6$	$-\frac{x^4}{y^2}$
$7x^3y$	y^2	$y(7x^3+y)$	$y(7x^3-y)$	$7x^3y^3$	$\frac{7x^3}{y}$
$4x^3y^3$	$-4xy^3$	$4(x-1)x(x+1)y^3$	$4x(x^2+1)y^3$	$-16x^4y^6$	$-x^2$
$-11xy$	$-4x^4y^2$	$-xy(4x^3y+11)$	$xy(4x^3y-11)$	$44x^5y^3$	$\frac{11}{4x^3y}$
$10xy$	$11x^2y$	$x(11x+10)y$	$-x(11x-10)y$	$110x^3y^2$	$\frac{10}{11x}$

6.

A	B	A + B	A - B	A × B	A : B
$10x^3y^4$	$11y$	$y(10x^3y^3+11)$	$y(10x^3y^3-11)$	$110x^3y^5$	$\frac{10x^3y^2}{11}$
$11x^4y$	$11x^3y^4$	$11x^3y(x+y^3)$	$11x^3y(x-y^3)$	$121x^7y^5$	$\frac{x}{y^3}$
$10x^4y^3$	$-x^2y$	$x^2y(10x^2y^2-1)$	$x^2y(10x^2y^2+1)$	$-10x^6y^4$	$-10x^2y^2$
$-3x^3y^4$	$-12x^2y^4$	$-3x^2(x+4)y^4$	$-3(x-4)x^2y^4$	$36x^5y^8$	$\frac{x}{4}$
$8x^2y^2$	$10x^3y^2$	$2x^2(5x+4)y^2$	$-2x^2(5x-4)y^2$	$80x^5y^4$	$\frac{4}{5x}$
$-10xy$	x^3y^2	$xy(x^2y-10)$	$-xy(x^2y+10)$	$-10x^4y^3$	$-\frac{10}{x^2y}$
$-8x^3y^2$	$-x^3y$	$-x^3y(8y+1)$	$-x^3y(8y-1)$	$8x^6y^3$	$8y$
$10x^2y$	$11xy^3$	$xy(10x+11y^2)$	$xy(10x-11y^2)$	$110x^3y^4$	$\frac{10x}{11y^2}$
$12x^3y^4$	$10y^3$	$2y^3(6x^3y+5)$	$2y^3(6x^3y-5)$	$120x^3y^7$	$\frac{6x^3y}{5}$
$-10y^2$	$-11x^2y^2$	$-(11x^2+10)y^2$	$(11x^2-10)y^2$	$110x^2y^4$	$\frac{10}{11x^2}$

7.

A	B	A + B	A - B	A × B	A : B
$-5x^3y^3$	$9x^3y^4$	$x^3y^3(9y-5)$	$-x^3y^3(9y+5)$	$-45x^6y^7$	$-\frac{5}{9y}$
$7x^4y^4$	$5x^4y^3$	$x^4y^3(7y+5)$	$x^4y^3(7y-5)$	$35x^8y^7$	$\frac{7y}{5}$
$12x^2y^4$	$12x^3y$	$12x^2y(x+y^3)$	$-12x^2y(x-y^3)$	$144x^5y^5$	$\frac{y^3}{x}$
$-3xy^2$	$10x^3y^4$	$xy^2(10x^2y^2-3)$	$-xy^2(10x^2y^2+3)$	$-30x^4y^6$	$-\frac{3}{10x^2y^2}$
$-5y^2$	$9x^4y^3$	$y^2(9x^4y-5)$	$-y^2(9x^4y+5)$	$-45x^4y^5$	$-\frac{5}{9x^4y}$
$4x^2y^2$	$10y^2$	$2(2x^2+5)y^2$	$2(2x^2-5)y^2$	$40x^2y^4$	$\frac{2x^2}{5}$
$10x^4y^2$	$-11y^2$	$(10x^4-11)y^2$	$(10x^4+11)y^2$	$-110x^4y^4$	$-\frac{10x^4}{11}$
$-10y^2$	$-3y^4$	$-y^2(3y^2+10)$	$y^2(3y^2-10)$	$30y^6$	$\frac{10}{3y^2}$
$-7y^4$	$-6x^4y^3$	$-y^3(6x^4+7y)$	$y^3(6x^4-7y)$	$42x^4y^7$	$\frac{7y}{6x^4}$
$-2x^4y^3$	$4x^4y^3$	$2x^4y^3$	$-6x^4y^3$	$-8x^8y^6$	$-\frac{1}{2}$

8.

A	B	A + B	A - B	A × B	A : B
$11y$	$11x^2y^2$	$11y(x^2y+1)$	$-11y(x^2y-1)$	$121x^2y^3$	$\frac{1}{x^2y}$
$-x^4y$	$-5y^4$	$-y(x^4+5y^3)$	$-y(x^4-5y^3)$	$5x^4y^5$	$\frac{x^4}{5y^3}$
$-6xy$	$-4y^4$	$-2y(3x+2y^3)$	$-2y(3x-2y^3)$	$24xy^5$	$\frac{3x}{2y^3}$
$10x^3y$	$-5x^4y^2$	$-5x^3y(xy-2)$	$5x^3y(xy+2)$	$-50x^7y^3$	$-\frac{2}{xy}$
$-4y^4$	$-11x^2y^2$	$-y^2(11x^2+4y^2)$	$y^2(11x^2-4y^2)$	$44x^2y^6$	$\frac{4y^2}{11x^2}$
$6xy$	$-8xy^4$	$-2xy(4y^3-3)$	$2xy(4y^3+3)$	$-48x^2y^5$	$-\frac{3}{4y^3}$
$-x^4y^2$	$6xy$	$-xy(x^3y-6)$	$-xy(x^3y+6)$	$-6x^5y^3$	$-\frac{x^3y}{6}$
$-x^2y$	$-12x^2y$	$-13x^2y$	$11x^2y$	$12x^4y^2$	$\frac{1}{12}$
$-12x^2y^2$	$5x^4y^3$	$x^2y^2(5x^2y-12)$	$-x^2y^2(5x^2y+12)$	$-60x^6y^5$	$-\frac{12}{5x^2y}$
$10x^2y^3$	$-12x^4y$	$-2x^2y(6x^2-5y^2)$	$2x^2y(6x^2+5y^2)$	$-120x^6y^4$	$-\frac{5y^2}{6x^2}$

9.

A	B	A + B	A - B	A × B	A : B
$11x^2y$	y^3	$y(11x^2 + y^2)$	$y(11x^2 - y^2)$	$11x^2y^4$	$\frac{11x^2}{y^2}$
$4x^3y^2$	$-7x^3y^2$	$-3x^3y^2$	$11x^3y^2$	$-28x^6y^4$	$-\frac{4}{7}$
$12x^3y$	$-7y$	$(12x^3 - 7)y$	$(12x^3 + 7)y$	$-84x^3y^2$	$-\frac{12x^3}{7}$
$2y^2$	$11y^2$	$13y^2$	$-9y^2$	$22y^4$	$\frac{2}{11}$
$-7x^2y^2$	$2x^3y$	$x^2y(2x - 7y)$	$-x^2y(2x + 7y)$	$-14x^5y^3$	$-\frac{7y}{2x}$
$-xy$	$-7x^2y^4$	$-xy(7xy^3 + 1)$	$xy(7xy^3 - 1)$	$7x^3y^5$	$\frac{1}{7xy^3}$
$3x^2y^2$	$-6x^4y^4$	$-3x^2y^2(2x^2y^2 - 1)$	$3x^2y^2(2x^2y^2 + 1)$	$-18x^6y^6$	$-\frac{1}{2x^2y^2}$
$-9x^3y^3$	$2x^3y^4$	$x^3y^3(2y - 9)$	$-x^3y^3(2y + 9)$	$-18x^6y^7$	$-\frac{9}{2y}$
$3y^2$	$-8xy^3$	$-y^2(8xy - 3)$	$y^2(8xy + 3)$	$-24xy^5$	$-\frac{3}{8xy}$
$-5x^3y$	$-12x^2y^2$	$-x^2y(5x + 12y)$	$-x^2y(5x - 12y)$	$60x^5y^3$	$\frac{5x}{12y}$

10.

A	B	A + B	A - B	A × B	A : B
$-9x^4y$	$-8x^2y^3$	$-x^2y(9x^2 + 8y^2)$	$-x^2y(9x^2 - 8y^2)$	$72x^6y^4$	$\frac{9x^2}{8y^2}$
$9y^3$	$-12x^3y^2$	$-3y^2(4x^3 - 3y)$	$3y^2(4x^3 + 3y)$	$-108x^3y^5$	$-\frac{3y}{4x^3}$
$3x^4y^4$	$4xy$	$xy(3x^3y^3 + 4)$	$xy(3x^3y^3 - 4)$	$12x^5y^5$	$\frac{3x^3y^3}{4}$
$-x^4y^3$	$6x^4y^2$	$-x^4(y - 6)y^2$	$-x^4y^2(y + 6)$	$-6x^8y^5$	$-\frac{y}{6}$
$-5x^3y^2$	$-12y$	$-y(5x^3y + 12)$	$-y(5x^3y - 12)$	$60x^3y^3$	$\frac{5x^3y}{12}$
$9x^2y^2$	$8x^2y^2$	$17x^2y^2$	x^2y^2	$72x^4y^4$	$\frac{9}{8}$
$3xy^3$	$3x^2y$	$3xy(x + y^2)$	$-3xy(x - y^2)$	$9x^3y^4$	$\frac{y^2}{x}$
$-7x^3y^4$	$6x^3y^2$	$-x^3y^2(7y^2 - 6)$	$-x^3y^2(7y^2 + 6)$	$-42x^6y^6$	$-\frac{7y^2}{6}$
$-3x^3y^3$	$-10x^2y$	$-x^2y(3xy^2 + 10)$	$-x^2y(3xy^2 - 10)$	$30x^5y^4$	$\frac{3xy^2}{10}$
$-12x^4y^2$	$-10x^4y^4$	$-2x^4y^2(5y^2 + 6)$	$2x^4y^2(5y^2 - 6)$	$120x^8y^6$	$\frac{6}{5y^2}$

11.

A	B	A + B	A - B	A × B	A : B
$-10x^3y^3$	$9xy^4$	$-xy^3(10x^2 - 9y)$	$-xy^3(10x^2 + 9y)$	$-90x^4y^7$	$-\frac{10x^2}{9y}$
$8y^2$	$10x^2y^3$	$2y^2(5x^2y + 4)$	$-2y^2(5x^2y - 4)$	$80x^2y^5$	$\frac{4}{5x^2y}$
$-11x^3y$	$-6x^3y^4$	$-x^3y(6y^3 + 11)$	$x^3y(6y^3 - 11)$	$66x^6y^5$	$\frac{11}{6y^3}$
$-11x^4y^2$	$-y^4$	$-y^2(11x^4 + y^2)$	$-y^2(11x^4 - y^2)$	$11x^4y^6$	$\frac{11x^4}{y^2}$
$-9x^2y^3$	$-2x^3y^3$	$-x^2(2x + 9)y^3$	$x^2(2x - 9)y^3$	$18x^5y^6$	$\frac{9}{2x}$
$-6x^2y^4$	$-5y$	$-y(6x^2y^3 + 5)$	$-y(6x^2y^3 - 5)$	$30x^2y^5$	$\frac{6x^2y^3}{5}$
$-3x^4y^2$	$-6x^4y^4$	$-3x^4y^2(2y^2 + 1)$	$3x^4y^2(2y^2 - 1)$	$18x^8y^6$	$\frac{1}{2y^2}$
$9y^2$	$-12x^3y^3$	$-3y^2(4x^3y - 3)$	$3y^2(4x^3y + 3)$	$-108x^3y^5$	$-\frac{3}{4x^3y}$
$2y^4$	$-5xy^2$	$-y^2(5x - 2y^2)$	$y^2(5x + 2y^2)$	$-10xy^6$	$-\frac{2y^2}{5x}$
$10xy^3$	$3y^3$	$(10x + 3)y^3$	$(10x - 3)y^3$	$30xy^6$	$\frac{10x}{3}$

12.

A	B	A + B	A - B	A × B	A : B
$-8xy^3$	$6y^3$	$-2(4x - 3)y^3$	$-2(4x + 3)y^3$	$-48xy^6$	$-\frac{4x}{3}$
$-8x^2y^4$	$9y^3$	$-y^3(8x^2y - 9)$	$-y^3(8x^2y + 9)$	$-72x^2y^7$	$-\frac{8x^2y}{9}$
$9x^4y^2$	x^2y^4	$x^2y^2(9x^2 + y^2)$	$x^2y^2(3x - y)(3x + y)$	$9x^6y^6$	$\frac{9x^2}{y^2}$
$9x^2y^3$	$-6y$	$3y(3x^2y^2 - 2)$	$3y(3x^2y^2 + 2)$	$-54x^2y^4$	$-\frac{3}{2}x^2y^2$
$4x^4y^2$	$12xy^4$	$4xy^2(x^3 + 3y^2)$	$4xy^2(x^3 - 3y^2)$	$48x^5y^6$	$\frac{x^3}{3y^2}$
$-10x^2y^2$	$12xy$	$-2xy(5xy - 6)$	$-2xy(5xy + 6)$	$-120x^3y^3$	$-\frac{5xy}{6}$
$-11x^2y$	$-2xy^2$	$-xy(11x + 2y)$	$-xy(11x - 2y)$	$22x^3y^3$	$\frac{11x}{2y}$
$-8x^4y^2$	$8x^2y^2$	$-8(x - 1)x^2(x + 1)y^2$	$-8x^2(x^2 + 1)y^2$	$-64x^6y^4$	$-x^2$
$-6y^3$	$5x^4y$	$y(5x^4 - 6y^2)$	$-y(5x^4 + 6y^2)$	$-30x^4y^4$	$-\frac{6y^2}{5x^4}$
$3x^2y^4$	$3x^2y$	$3x^2y(y + 1)$ $(y^2 - y + 1)$	$3x^2(y - 1)$ $y(y^2 + y + 1)$	$9x^4y^5$	y^3

13.

A	B	A + B	A - B	A × B	A : B
$8x^3y^2$	$11xy^3$	$xy^2(8x^2 + 11y)$	$xy^2(8x^2 - 11y)$	$88x^4y^5$	$\frac{8x^2}{11y}$
$-8x^2y^3$	$10y^2$	$-2y^2(4x^2y - 5)$	$-2y^2(4x^2y + 5)$	$-80x^2y^5$	$-\frac{4x^2y}{5}$
$7x^3y^2$	$-x^4y^3$	$-x^3y^2(xy - 7)$	$x^3y^2(xy + 7)$	$-7x^7y^5$	$-\frac{7}{xy}$
$-8xy^4$	$-3x^4y^4$	$-x(3x^3 + 8)y^4$	$x(3x^3 - 8)y^4$	$24x^5y^8$	$\frac{8}{3x^3}$
$-2xy^2$	$-5x^2y^4$	$-xy^2(5xy^2 + 2)$	$xy^2(5xy^2 - 2)$	$10x^3y^6$	$\frac{2}{5xy^2}$
$5x^4y^4$	$-3xy^2$	$xy^2(5x^3y^2 - 3)$	$xy^2(5x^3y^2 + 3)$	$-15x^5y^6$	$-\frac{5}{3}x^3y^2$
$-10x^4y$	$-3x^3y^2$	$-x^3y(10x + 3y)$	$-x^3y(10x - 3y)$	$30x^7y^3$	$\frac{10x}{3y}$
xy	$-8x^2y$	$-x(8x - 1)y$	$x(8x + 1)y$	$-8x^3y^2$	$-\frac{1}{8x}$
$-x^4y^2$	$-6x^2y^3$	$-x^2y^2(x^2 + 6y)$	$-x^2y^2(x^2 - 6y)$	$6x^6y^5$	$\frac{x^2}{6y}$
$5xy^2$	$7x^2y^4$	$xy^2(7xy^2 + 5)$	$-xy^2(7xy^2 - 5)$	$35x^3y^6$	$\frac{5}{7xy^2}$

14.

A	B	A + B	A - B	A × B	A : B
$5x^3y^2$	$-6x^2y^2$	$x^2(5x - 6)y^2$	$x^2(5x + 6)y^2$	$-30x^5y^4$	$-\frac{5x}{6}$
$-11x^4y^4$	$-11x^2y$	$-11x^2y(x^2y^3 + 1)$	$-11x^2y(x^2y^3 - 1)$	$121x^6y^5$	x^2y^3
$12x^4y^3$	$-9xy^2$	$3xy^2(4x^3y - 3)$	$3xy^2(4x^3y + 3)$	$-108x^5y^5$	$-\frac{4x^3y}{3}$
$11x^4y^2$	$2x^3y^3$	$x^3y^2(11x + 2y)$	$x^3y^2(11x - 2y)$	$22x^7y^5$	$\frac{11x}{2y}$
$3x^4y^4$	$11x^3y^2$	$x^3y^2(3xy^2 + 11)$	$x^3y^2(3xy^2 - 11)$	$33x^7y^6$	$\frac{3xy^2}{11}$
xy^4	$-11y^3$	$y^3(xy - 11)$	$y^3(xy + 11)$	$-11xy^7$	$-\frac{xy}{11}$
$-4x^2y^2$	$-5x^3y$	$-x^2y(5x + 4y)$	$x^2y(5x - 4y)$	$20x^5y^3$	$\frac{4y}{5x}$
$7x^2y^2$	$4y^4$	$y^2(7x^2 + 4y^2)$	$y^2(7x^2 - 4y^2)$	$28x^2y^6$	$\frac{7x^2}{4y^2}$
$-6xy^2$	$-9y^3$	$-3y^2(2x + 3y)$	$-3y^2(2x - 3y)$	$54xy^5$	$\frac{2x}{3y}$
$3x^3y^3$	$-11xy^3$	$x(3x^2 - 11)y^3$	$x(3x^2 + 11)y^3$	$-33x^4y^6$	$-\frac{3x^2}{11}$

15.

A	B	A + B	A - B	A × B	A : B
$-12x^4y$	y^3	$-y(12x^4 - y^2)$	$-y(12x^4 + y^2)$	$-12x^4y^4$	$-\frac{12x^4}{y^2}$
$2x^2y^3$	$2x^4y$	$2x^2y(x^2 + y^2)$	$-2x^2y(x - y)(x + y)$	$4x^6y^4$	$\frac{y^2}{x^2}$
$11x^2y$	$-8y^4$	$y(11x^2 - 8y^3)$	$y(11x^2 + 8y^3)$	$-88x^2y^5$	$-\frac{11x^2}{8y^3}$
$6x^2y^2$	$3y$	$3y(2x^2y + 1)$	$3y(2x^2y - 1)$	$18x^2y^3$	$2x^2y$
$-2x^4y^4$	$-3xy$	$-xy(2x^3y^3 + 3)$	$-xy(2x^3y^3 - 3)$	$6x^5y^5$	$\frac{2x^3y^3}{3}$
$-12y^3$	$10x^3y^3$	$2(5x^3 - 6)y^3$	$-2(5x^3 + 6)y^3$	$-120x^3y^6$	$-\frac{6}{5x^3}$
$-5x^4y^3$	$-2x^4y$	$-x^4y(5y^2 + 2)$	$-x^4y(5y^2 - 2)$	$10x^8y^4$	$\frac{5y^2}{2}$
$6x^2y^4$	$-4x^3y^3$	$-2x^2y^3(2x - 3y)$	$2x^2y^3(2x + 3y)$	$-24x^5y^7$	$-\frac{3y}{2x}$
$12x^2y^2$	$2x^3y$	$2x^2y(x + 6y)$	$-2x^2y(x - 6y)$	$24x^5y^3$	$\frac{6y}{x}$
$-x^4y^3$	$-11x^3y^3$	$-x^3(x + 11)y^3$	$-(x - 11)x^3y^3$	$11x^7y^6$	$\frac{x}{11}$

16.

A	B	A + B	A - B	A × B	A : B
$-9x^3y^4$	$-xy^4$	$-x(9x^2 + 1)y^4$	$-x(3x - 1)(3x + 1)y^4$	$9x^4y^8$	$9x^2$
$-2x^2y$	$9x^4y$	$x^2(9x^2 - 2)y$	$-x^2(9x^2 + 2)y$	$-18x^6y^2$	$-\frac{2}{9x^2}$
$-2xy^3$	$7x^4y^2$	$xy^2(7x^3 - 2y)$	$-xy^2(7x^3 + 2y)$	$-14x^5y^5$	$-\frac{2y}{7x^3}$
x^4y^2	y^2	$(x^4 + 1)y^2$	$(x - 1)(x + 1)(x^2 + 1)y^2$	x^4y^4	x^4
$10x^2y^3$	$-5y^4$	$5y^3(2x^2 - y)$	$5y^3(2x^2 + y)$	$-50x^2y^7$	$-\frac{2x^2}{y}$
$3xy^2$	$-6x^4y^3$	$-3xy^2(2x^3y - 1)$	$3xy^2(2x^3y + 1)$	$-18x^5y^5$	$-\frac{1}{2x^3y}$
$11x^2y$	$-12x^4y^2$	$-x^2y(12x^2y - 11)$	$x^2y(12x^2y + 11)$	$-132x^6y^3$	$-\frac{11}{12x^2y}$
$8x^3y^4$	$-5x^3y$	$x^3y(8y^3 - 5)$	$x^3y(8y^3 + 5)$	$-40x^6y^5$	$-\frac{8y^3}{5}$
$3x^4y^2$	$5x^4y^4$	$x^4y^2(5y^2 + 3)$	$-x^4y^2(5y^2 - 3)$	$15x^8y^6$	$\frac{3}{5y^2}$
$3y^4$	$9y^2$	$3y^2(y^2 + 3)$	$3y^2(y^2 - 3)$	$27y^6$	$\frac{y^2}{3}$

17.

A	B	A + B	A - B	A × B	A : B
$-5y^4$	$-11x^2y^2$	$-y^2(11x^2 + 5y^2)$	$y^2(11x^2 - 5y^2)$	$55x^2y^6$	$\frac{5y^2}{11x^2}$
$-3xy^2$	$12y^2$	$-3(x-4)y^2$	$-3(x+4)y^2$	$-36xy^4$	$-\frac{x}{4}$
$3x^3y^2$	$-12x^4y^3$	$-3x^3y^2(4xy-1)$	$3x^3y^2(4xy+1)$	$-36x^7y^5$	$-\frac{1}{4xy}$
$-11x^4y^3$	$6x^4y^3$	$-5x^4y^3$	$-17x^4y^3$	$-66x^8y^6$	$-\frac{11}{6}$
$-11x^4y$	$7x^3y^2$	$-x^3y(11x-7y)$	$-x^3y(11x+7y)$	$-77x^7y^3$	$-\frac{11x}{7y}$
$-12x^4y^3$	$12x^3y^2$	$-12x^3y^2(xy-1)$	$-12x^3y^2(xy+1)$	$-144x^7y^5$	$-xy$
$5xy^2$	$-xy^4$	$-xy^2(y^2-5)$	$xy^2(y^2+5)$	$-5x^2y^6$	$-\frac{5}{y^2}$
$-2xy^2$	$3xy^3$	$xy^2(3y-2)$	$-xy^2(3y+2)$	$-6x^2y^5$	$-\frac{2}{3y}$
$7x^4y^2$	$-9x^4y^4$	$-x^4y^2(9y^2-7)$	$x^4y^2(9y^2+7)$	$-63x^8y^6$	$-\frac{7}{9y^2}$
$-5y^4$	$2x^3y$	$y(2x^3-5y^3)$	$-y(2x^3+5y^3)$	$-10x^3y^5$	$-\frac{5y^3}{2x^3}$

18.

A	B	A + B	A - B	A × B	A : B
$-2y$	y^4	$y(y^3-2)$	$-y(y^3+2)$	$-2y^5$	$-\frac{2}{y^3}$
$-y^4$	$-3x^3y^4$	$-(3x^3+1)y^4$	$(3x^3-1)y^4$	$3x^3y^8$	$\frac{1}{3x^3}$
$2y^3$	$-12x^4y$	$-2y(6x^4-y^2)$	$2y(6x^4+y^2)$	$-24x^4y^4$	$-\frac{y^2}{6x^4}$
$-7xy$	$-10x^2y^2$	$-xy(10xy+7)$	$xy(10xy-7)$	$70x^3y^3$	$\frac{7}{10xy}$
$-9x^2y^2$	$6y$	$-3y(3x^2y-2)$	$-3y(3x^2y+2)$	$-54x^2y^3$	$-\frac{3x^2y}{2}$
$-11xy$	$-6x^2y^4$	$-xy(6xy^3+11)$	$xy(6xy^3-11)$	$66x^3y^5$	$\frac{11}{6xy^3}$
x^3y^3	$9x^3y^2$	$x^3y^2(y+9)$	$x^3(y-9)y^2$	$9x^6y^5$	$\frac{y}{9}$
$9xy^2$	$2xy^3$	$xy^2(2y+9)$	$-xy^2(2y-9)$	$18x^2y^5$	$\frac{9}{2y}$
$-6x^4y$	$6x^2y^4$	$-6x^2y(x^2-y^3)$	$-6x^2y(x^2+y^3)$	$-36x^6y^5$	$-\frac{x^2}{y^3}$
$12x^2y^2$	$-5x^3y$	$-x^2y(5x-12y)$	$x^2y(5x+12y)$	$-60x^5y^3$	$-\frac{12y}{5x}$

19.

A	B	A + B	A - B	A × B	A : B
$-10x^4y^3$	$-8x^2y$	$-2x^2y(5x^2y^2 + 4)$	$-2x^2y(5x^2y^2 - 4)$	$80x^6y^4$	$\frac{5x^2y^2}{4}$
$-12x^2y$	$-6y^3$	$-6y(2x^2 + y^2)$	$-6y(2x^2 - y^2)$	$72x^2y^4$	$\frac{2x^2}{y^2}$
$3x^4y^2$	$-3x^3y^2$	$3(x-1)x^3y^2$	$3x^3(x+1)y^2$	$-9x^7y^4$	$-x$
$-7x^4y^3$	$8x^4y^3$	x^4y^3	$-15x^4y^3$	$-56x^8y^6$	$-\frac{7}{8}$
$3xy$	$-x^4y^3$	$-xy(x^3y^2 - 3)$	$xy(x^3y^2 + 3)$	$-3x^5y^4$	$-\frac{3}{x^3y^2}$
$10x^3y^3$	$2xy^4$	$2xy^3(5x^2 + y)$	$2xy^3(5x^2 - y)$	$20x^4y^7$	$\frac{5x^2}{y}$
$-4x^4y$	$-4x^2y$	$-4x^2(x^2 + 1)y$	$-4(x-1)x^2(x+1)y$	$16x^6y^2$	x^2
$12x^3y^3$	$-6y^2$	$6y^2(2x^3y - 1)$	$6y^2(2x^3y + 1)$	$-72x^3y^5$	$-2x^3y$
$10y$	$12xy^2$	$2y(6xy + 5)$	$-2y(6xy - 5)$	$120xy^3$	$\frac{5}{6xy}$
$11y^4$	$7y^4$	$18y^4$	$4y^4$	$77y^8$	$\frac{11}{7}$

20.

A	B	A + B	A - B	A × B	A : B
$12xy$	$-5x^2y^2$	$-xy(5xy - 12)$	$xy(5xy + 12)$	$-60x^3y^3$	$-\frac{12}{5xy}$
$8x^3y^2$	$-5x^3y^4$	$-x^3y^2(5y^2 - 8)$	$x^3y^2(5y^2 + 8)$	$-40x^6y^6$	$-\frac{8}{5y^2}$
$-5y$	$-4x^3y$	$-(4x^3 + 5)y$	$(4x^3 - 5)y$	$20x^3y^2$	$\frac{5}{4x^3}$
$-7x^2y^2$	$-4x^3y^2$	$-x^2(4x + 7)y^2$	$x^2(4x - 7)y^2$	$28x^5y^4$	$\frac{7}{4x}$
$-9xy$	$-11x^2y^3$	$-xy(11xy^2 + 9)$	$xy(11xy^2 - 9)$	$99x^3y^4$	$\frac{9}{11xy^2}$
$3xy^4$	$-10xy^2$	$xy^2(3y^2 - 10)$	$xy^2(3y^2 + 10)$	$-30x^2y^6$	$-\frac{3y^2}{10}$
$10x^2y$	$6x^4y^3$	$2x^2y(3x^2y^2 + 5)$	$-2x^2y(3x^2y^2 - 5)$	$60x^6y^4$	$\frac{5}{3x^2y^2}$
$-12y^3$	$5x^2y$	$y(5x^2 - 12y^2)$	$-y(5x^2 + 12y^2)$	$-60x^2y^4$	$-\frac{12y^2}{5x^2}$
$-2x^3y^3$	$11x^4y^2$	$x^3y^2(11x - 2y)$	$-x^3y^2(11x + 2y)$	$-22x^7y^5$	$-\frac{2y}{11x}$
$-7xy^4$	$-7x^3y$	$-7xy(x^2 + y^3)$	$7xy(x^2 - y^3)$	$49x^4y^5$	$\frac{y^3}{x^2}$

21.

A	B	A + B	A - B	A × B	A : B
$10x^3y^2$	$-x^2y^2$	$x^2(10x-1)y^2$	$x^2(10x+1)y^2$	$-10x^5y^4$	$-10x$
$4xy^4$	$-9xy$	$xy(4y^3-9)$	$xy(4y^3+9)$	$-36x^2y^5$	$-\frac{4y^3}{9}$
$2x^4y^3$	$5xy^4$	$xy^3(2x^3+5y)$	$xy^3(2x^3-5y)$	$10x^5y^7$	$\frac{2x^3}{5y}$
$2y$	$9xy$	$(9x+2)y$	$-(9x-2)y$	$18xy^2$	$\frac{2}{9x}$
$4x^3y^4$	$-10x^3y^4$	$-6x^3y^4$	$14x^3y^4$	$-40x^6y^8$	$-\frac{2}{5}$
$6y^2$	$5x^4y^4$	$y^2(5x^4y^2+6)$	$-y^2(5x^4y^2-6)$	$30x^4y^6$	$\frac{6}{5x^4y^2}$
$6x^2y^2$	$-5x^4y^4$	$-x^2y^2(5x^2y^2-6)$	$x^2y^2(5x^2y^2+6)$	$-30x^6y^6$	$-\frac{6}{5x^2y^2}$
$-12x^2y^4$	$3x^2y^4$	$-9x^2y^4$	$-15x^2y^4$	$-36x^4y^8$	-4
$-7xy^2$	$-4x^3y^4$	$-xy^2(4x^2y^2+7)$	$xy^2(4x^2y^2-7)$	$28x^4y^6$	$\frac{7}{4x^2y^2}$
$9x^2y$	$6xy^2$	$3xy(3x+2y)$	$3xy(3x-2y)$	$54x^3y^3$	$\frac{3x}{2y}$

22.

A	B	A + B	A - B	A × B	A : B
$-8xy^2$	$10x^2y^2$	$2x(5x-4)y^2$	$-2x(5x+4)y^2$	$-80x^3y^4$	$-\frac{4}{5x}$
$-3x^2y$	$5x^2y$	$2x^2y$	$-8x^2y$	$-15x^4y^2$	$-\frac{3}{5}$
$-8x^3y^4$	$5x^4y^3$	$x^3y^3(5x-8y)$	$-x^3y^3(5x+8y)$	$-40x^7y^7$	$-\frac{8y}{5x}$
$-8y^4$	$2y$	$-2y(4y^3-1)$	$-2y(4y^3+1)$	$-16y^5$	$-4y^3$
$-12x^2y^4$	$12y^4$	$-12(x-1)(x+1)y^4$	$-12(x^2+1)y^4$	$-144x^2y^8$	$-x^2$
$-x^3y^3$	$5x^4y^2$	$x^3y^2(5x-y)$	$-x^3y^2(5x+y)$	$-5x^7y^5$	$-\frac{y}{5x}$
$-2y^4$	$6y^3$	$-2(y-3)y^3$	$-2y^3(y+3)$	$-12y^7$	$-\frac{y}{3}$
$6x^4y^3$	$9y^2$	$3y^2(2x^4y+3)$	$3y^2(2x^4y-3)$	$54x^4y^5$	$\frac{2x^4y}{3}$
$-4x^2y^4$	$9x^2y^4$	$5x^2y^4$	$-13x^2y^4$	$-36x^4y^8$	$-\frac{4}{9}$
$7x^3y^3$	$6y^3$	$(7x^3+6)y^3$	$(7x^3-6)y^3$	$42x^3y^6$	$\frac{7x^3}{6}$

23.

A	B	A + B	A - B	A × B	A : B
$2x^3y^3$	$7x^2y$	$x^2y(2xy^2 + 7)$	$x^2y(2xy^2 - 7)$	$14x^5y^4$	$\frac{2xy^2}{7}$
$-9xy^4$	$-8x^4y^2$	$-xy^2(8x^3 + 9y^2)$	$xy^2(8x^3 - 9y^2)$	$72x^5y^6$	$\frac{9y^2}{8x^3}$
$-6x^3y$	$-8x^3y^3$	$-2x^3y(4y^2 + 3)$	$2x^3y(4y^2 - 3)$	$48x^6y^4$	$\frac{3}{4y^2}$
$-9x^3y$	$-10x^4y^4$	$-x^3y(10xy^3 + 9)$	$x^3y(10xy^3 - 9)$	$90x^7y^5$	$\frac{9}{10xy^3}$
$-9x^3y^3$	$-7x^2y$	$-x^2y(9xy^2 + 7)$	$-x^2y(9xy^2 - 7)$	$63x^5y^4$	$\frac{9xy^2}{7}$
$7y^2$	$-11x^4y^3$	$-y^2(11x^4y - 7)$	$y^2(11x^4y + 7)$	$-77x^4y^5$	$-\frac{7}{11x^4y}$
$-x^3y^2$	$-9x^3y^4$	$-x^3y^2(9y^2 + 1)$	$x^3y^2(3y - 1)(3y + 1)$	$9x^6y^6$	$\frac{1}{9y^2}$
$-y^3$	$-11xy^4$	$-y^3(11xy + 1)$	$y^3(11xy - 1)$	$11xy^7$	$\frac{1}{11xy}$
$10x^4y^4$	$8x^4y^4$	$18x^4y^4$	$2x^4y^4$	$80x^8y^8$	$\frac{5}{4}$
$11y^4$	$-3x^2y^2$	$-y^2(3x^2 - 11y^2)$	$y^2(3x^2 + 11y^2)$	$-33x^2y^6$	$-\frac{11y^2}{3x^2}$

24.

A	B	A + B	A - B	A × B	A : B
$2x^3y^3$	$-9xy^4$	$xy^3(2x^2 - 9y)$	$xy^3(2x^2 + 9y)$	$-18x^4y^7$	$-\frac{2x^2}{9y}$
$9x^2y^3$	$-x^2y^4$	$-x^2(y - 9)y^3$	$x^2y^3(y + 9)$	$-9x^4y^7$	$-\frac{9}{y}$
$10x^4y^3$	$-7x^4y^4$	$-x^4y^3(7y - 10)$	$x^4y^3(7y + 10)$	$-70x^8y^7$	$-\frac{10}{7y}$
$-10y^2$	$-y^4$	$-y^2(y^2 + 10)$	$y^2(y^2 - 10)$	$10y^6$	$\frac{10}{y^2}$
$-6y$	$12y^3$	$6y(2y^2 - 1)$	$-6y(2y^2 + 1)$	$-72y^4$	$-\frac{1}{2y^2}$
$-11y$	$5xy^2$	$y(5xy - 11)$	$-y(5xy + 11)$	$-55xy^3$	$-\frac{11}{5xy}$
$-12xy$	$-10x^2y^4$	$-2xy(5xy^3 + 6)$	$2xy(5xy^3 - 6)$	$120x^3y^5$	$\frac{6}{5xy^3}$
$2y^4$	$4y^4$	$6y^4$	$-2y^4$	$8y^8$	$\frac{1}{2}$
$-11y^3$	$11x^3y^2$	$11y^2(x^3 - y)$	$-11y^2(x^3 + y)$	$-121x^3y^5$	$-\frac{y}{x^3}$
$4x^3y$	$9x^4y^3$	$x^3y(9xy^2 + 4)$	$-x^3y(9xy^2 - 4)$	$36x^7y^4$	$\frac{4}{9xy^2}$

25.

A	B	A + B	A - B	A × B	A : B
$-12x^3y$	$7xy^3$	$-xy(12x^2 - 7y^2)$	$-xy(12x^2 + 7y^2)$	$-84x^4y^4$	$-\frac{12x^2}{7y^2}$
$5x^4y^4$	$8x^2y$	$x^2y(5x^2y^3 + 8)$	$x^2y(5x^2y^3 - 8)$	$40x^6y^5$	$\frac{5x^2y^3}{8}$
$-x^3y^4$	$12x^4y^2$	$x^3y^2(12x - y^2)$	$-x^3y^2(12x + y^2)$	$-12x^7y^6$	$-\frac{y^2}{12x}$
$-3x^2y$	$5y^2$	$y(-(3x^2 - 5y))$	$-y(3x^2 + 5y)$	$-15x^2y^3$	$-\frac{3x^2}{5y}$
$2x^4y^2$	xy^2	$x(2x^3 + 1)y^2$	$x(2x^3 - 1)y^2$	$2x^5y^4$	$2x^3$
$-5y^3$	$-3xy^3$	$-(3x + 5)y^3$	$(3x - 5)y^3$	$15xy^6$	$\frac{5}{3x}$
$6y$	$-8xy^2$	$-2y(4xy - 3)$	$2y(4xy + 3)$	$-48xy^3$	$-\frac{3}{4xy}$
$-12xy^4$	xy	$-xy(12y^3 - 1)$	$-xy(12y^3 + 1)$	$-12x^2y^5$	$-12y^3$
$9y^3$	$-4x^2y$	$y(-(2x - 3y))(2x + 3y)$	$y(4x^2 + 9y^2)$	$-36x^2y^4$	$-\frac{9y^2}{4x^2}$
$2x^4y^3$	$-8xy^4$	$2xy^3(x^3 - 4y)$	$2xy^3(x^3 + 4y)$	$-16x^5y^7$	$-\frac{x^3}{4y}$

26.

A	B	A + B	A - B	A × B	A : B
$-3x^4y^3$	$-8y^3$	$-(3x^4 + 8)y^3$	$-(3x^4 - 8)y^3$	$24x^4y^6$	$\frac{3x^4}{8}$
$-3x^3y$	$12xy^4$	$-3xy(x^2 - 4y^3)$	$-3xy(x^2 + 4y^3)$	$-36x^4y^5$	$-\frac{x^2}{4y^3}$
$3y^2$	$4x^4y$	$y(4x^4 + 3y)$	$y(-(4x^4 - 3y))$	$12x^4y^3$	$\frac{3y}{4x^4}$
$-4x^3y^4$	$-4x^2y^2$	$-4x^2y^2(xy^2 + 1)$	$-4x^2y^2(xy^2 - 1)$	$16x^5y^6$	xy^2
$-4x^3y^3$	$-4x^4y^2$	$-4x^3y^2(x + y)$	$4x^3y^2(x - y)$	$16x^7y^5$	$\frac{y}{x}$
$-6x^3y$	$-x^3y^3$	$-x^3y(y^2 + 6)$	$x^3y(y^2 - 6)$	$6x^6y^4$	$\frac{6}{y^2}$
$-7x^4y$	$-10xy^4$	$-xy(7x^3 + 10y^3)$	$-xy(7x^3 - 10y^3)$	$70x^5y^5$	$\frac{7x^3}{10y^3}$
$7xy^2$	$4xy^3$	$xy^2(4y + 7)$	$-xy^2(4y - 7)$	$28x^2y^5$	$\frac{7}{4y}$
$-3xy^2$	$6x^3y^4$	$3xy^2(2x^2y^2 - 1)$	$-3xy^2(2x^2y^2 + 1)$	$-18x^4y^6$	$-\frac{1}{2x^2y^2}$
$4xy^3$	$6x^2y$	$2xy(3x + 2y^2)$	$-2xy(3x - 2y^2)$	$24x^3y^4$	$\frac{2y^2}{3x}$

27.

A	B	A + B	A - B	A × B	A : B
$3x^4y$	$-6xy^4$	$3xy(x^3 - 2y^3)$	$3xy(x^3 + 2y^3)$	$-18x^5y^5$	$-\frac{x^3}{2y^3}$
$2xy$	$-7x^3y$	$-x(7x^2 - 2)y$	$x(7x^2 + 2)y$	$-14x^4y^2$	$-\frac{2}{7x^2}$
$-6x^4y^3$	$4xy^2$	$-2xy^2(3x^3y - 2)$	$-2xy^2(3x^3y + 2)$	$-24x^5y^5$	$-\frac{3x^3y}{2}$
$-3x^3y^4$	$4x^3y^4$	x^3y^4	$-7x^3y^4$	$-12x^6y^8$	$-\frac{3}{4}$
$11xy$	$7xy^3$	$xy(7y^2 + 11)$	$-xy(7y^2 - 11)$	$77x^2y^4$	$\frac{11}{7y^2}$
$12x^3y^2$	$-2x^2y^3$	$2x^2y^2(6x - y)$	$2x^2y^2(6x + y)$	$-24x^5y^5$	$-\frac{6x}{y}$
$-6x^3y^2$	$6x^3y^2$	0	$-12x^3y^2$	$-36x^6y^4$	-1
$-9x^2y^4$	$-x^3y$	$-x^2y(x + 9y^3)$	$x^2y(x - 9y^3)$	$9x^5y^5$	$\frac{9y^3}{x}$
$3x^2y^4$	$-4x^4y$	$-x^2y(4x^2 - 3y^3)$	$x^2y(4x^2 + 3y^3)$	$-12x^6y^5$	$-\frac{3y^3}{4x^2}$
$9xy^2$	$2x^4y^2$	$x(2x^3 + 9)y^2$	$-x(2x^3 - 9)y^2$	$18x^5y^4$	$\frac{9}{2x^3}$

28.

A	B	A + B	A - B	A × B	A : B
xy^2	$10x^3y$	$xy(10x^2 + y)$	$-xy(10x^2 - y)$	$10x^4y^3$	$\frac{y}{10x^2}$
$6x^3y^4$	$-7x^2y$	$x^2y(6xy^3 - 7)$	$x^2y(6xy^3 + 7)$	$-42x^5y^5$	$-\frac{6xy^3}{7}$
$10xy$	$9xy^4$	$xy(9y^3 + 10)$	$-xy(9y^3 - 10)$	$90x^2y^5$	$\frac{10}{9y^3}$
$-4x^3y$	$-3x^3y^4$	$-x^3y(3y^3 + 4)$	$x^3y(3y^3 - 4)$	$12x^6y^5$	$\frac{4}{3y^3}$
$-8xy^3$	$-11x^3y^3$	$-x(11x^2 + 8)y^3$	$x(11x^2 - 8)y^3$	$88x^4y^6$	$\frac{8}{11x^2}$
$-10x^4y^2$	x^2y^4	$-x^2y^2(10x^2 - y^2)$	$-x^2y^2(10x^2 + y^2)$	$-10x^6y^6$	$-\frac{10x^2}{y^2}$
$-6y$	$5x^4y^2$	$y(5x^4y - 6)$	$-y(5x^4y + 6)$	$-30x^4y^3$	$-\frac{6}{5x^4y}$
$-4x^4y^2$	$9xy$	$-xy(4x^3y - 9)$	$-xy(4x^3y + 9)$	$-36x^5y^3$	$-\frac{4x^3y}{9}$
$-5x^4y^2$	$-xy^4$	$-xy^2(5x^3 + y^2)$	$-xy^2(5x^3 - y^2)$	$5x^5y^6$	$\frac{5x^3}{y^2}$
$-y^3$	$-12x^4y$	$-y(12x^4 + y^2)$	$y(12x^4 - y^2)$	$12x^4y^4$	$\frac{y^2}{12x^4}$

29.

A	B	A + B	A - B	A × B	A : B
$-3x^2y^3$	$-xy^2$	$-xy^2(3xy+1)$	$-xy^2(3xy-1)$	$3x^3y^5$	$3xy$
$-11xy^2$	$-4xy^4$	$-xy^2(4y^2+11)$	$xy^2(4y^2-11)$	$44x^2y^6$	$\frac{11}{4y^2}$
$-8x^3y$	$6xy$	$-2x(4x^2-3)y$	$-2x(4x^2+3)y$	$-48x^4y^2$	$-\frac{4x^2}{3}$
$-3y^3$	$5y^4$	$y^3(5y-3)$	$-y^3(5y+3)$	$-15y^7$	$-\frac{3}{5y}$
$-11x^4y$	$-6x^2y^2$	$-x^2y(11x^2+6y)$	$-x^2y(11x^2-6y)$	$66x^6y^3$	$\frac{11x^2}{6y}$
$2x^3y^4$	$5x^4y^2$	$x^3y^2(5x+2y^2)$	$-x^3y^2(5x-2y^2)$	$10x^7y^6$	$\frac{2y^2}{5x}$
$-10y^2$	$-6x^3y^3$	$-2y^2(3x^3y+5)$	$2y^2(3x^3y-5)$	$60x^3y^5$	$\frac{5}{3x^3y}$
$7x^4y^3$	$-8xy^4$	$xy^3(7x^3-8y)$	$xy^3(7x^3+8y)$	$-56x^5y^7$	$-\frac{7x^3}{8y}$
$7x^3y^2$	$-4x^4y^2$	$-x^3(4x-7)y^2$	$x^3(4x+7)y^2$	$-28x^7y^4$	$-\frac{7}{4x}$
$4x^2y$	xy^2	$xy(4x+y)$	$xy(4x-y)$	$4x^3y^3$	$\frac{4x}{y}$

30.

A	B	A + B	A - B	A × B	A : B
$-12xy^3$	$5x^4y^3$	$x(5x^3-12)y^3$	$-x(5x^3+12)y^3$	$-60x^5y^6$	$-\frac{12}{5x^3}$
$-11y^2$	$-y$	$-y(11y+1)$	$-y(11y-1)$	$11y^3$	$11y$
$6x^2y$	$8x^4y^2$	$2x^2y(4x^2y+3)$	$-2x^2y(4x^2y-3)$	$48x^6y^3$	$\frac{3}{4x^2y}$
$-12x^2y$	$5x^4y^3$	$x^2y(5x^2y^2-12)$	$-x^2y(5x^2y^2+12)$	$-60x^6y^4$	$-\frac{12}{5x^2y^2}$
$11y^2$	$8x^2y$	$y(8x^2+11y)$	$y(-(8x^2-11y))$	$88x^2y^3$	$\frac{11y}{8x^2}$
$-9xy^2$	$-4xy^4$	$-xy^2(4y^2+9)$	$xy^2(2y-3)(2y+3)$	$36x^2y^6$	$\frac{9}{4y^2}$
$-11x^2y^3$	$7x^4y^2$	$x^2y^2(7x^2-11y)$	$-x^2y^2(7x^2+11y)$	$-77x^6y^5$	$-\frac{11y}{7x^2}$
$11x^4y$	$-12x^3y$	$x^3(11x-12)y$	$x^3(11x+12)y$	$-132x^7y^2$	$-\frac{11x}{12}$
$-9y^3$	$-10y^2$	$-y^2(9y+10)$	$-y^2(9y-10)$	$90y^5$	$\frac{9y}{10}$
$-x^3y^2$	$-6x^3y^3$	$-x^3y^2(6y+1)$	$x^3y^2(6y-1)$	$6x^6y^5$	$\frac{1}{6y}$