

Name: _____

Subtracting Polynomial Expressions

Solve the following and write your answers on the blanks alongside.

1 $(4 + 2x^3) - (5x^2 + 2)$

2 $(3x^2 - 1) - (4 + 2x^3)$

3 $(7x^4 - 3x) - (3x - 3x^4)$

4 $(4x^3 + 9x^2 - 12x) - (x^3 + 9 - x)$

5 $(11x + 22x^2) - (5x + 2x^3)$

6 $(14 + 12x^3) - (17x^4 + 15 - 5x^3)$

7 $(x^4 - x^3) - (2x^2 + 7x)$

8 $(20x + 11x^4) - (15x + 16x^2 - 17x^4)$

9 $(9x^2 - 3x) - (4x^3 + 2x - 12)$

10 $(8x - 4x^2) - (7x^3 - x)$

11 $(5x^2 + 4x - 1) - (2x^2 - 3x + 2)$

12 $(10x^4 + 17x^3) - (14x^3 - 5x + 7x^4)$

Name: _____

Subtracting Polynomial Expressions

Answers

① $(4 + 2x^3) - (5x^2 + 2)$

$$2x^3 - 5x^2 + 2$$

② $(3x^2 - 1) - (4 + 2x^3)$

$$-2x^3 + 3x^2 - 5$$

③ $(7x^4 - 3x) - (3x - 3x^4)$

$$11x^4 - 6x$$

④ $(4x^3 + 9x^2 - 12x) - (x^3 + 9 - x)$

$$3x^3 + 9x^2 - 11x - 9$$

⑤ $(11x + 22x^2) - (5x + 2x^3)$

$$-2x^3 + 22x^2 + 6x$$

⑥ $(14 + 12x^3) - (17x^4 + 15 - 5x^3)$

$$-17x^4 + 17x^3 - 1$$

⑦ $(x^4 - x^3) - (2x^2 + 7x)$

$$x^4 - x^3 - 2x^2 - 7x$$

⑧ $(20x + 11x^4) - (15x + 16x^2 - 17x^4)$

$$28x^4 - 16x^2 + 5x$$

⑨ $(9x^2 - 3x) - (4x^3 + 2x - 12)$

$$-4x^3 + 9x^2 - 5x + 12$$

⑩ $(8x - 4x^2) - (7x^3 - x)$

$$-7x^3 - 4x^2 + 9x$$

⑪ $(5x^2 + 4x - 1) - (2x^2 - 3x + 2)$

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

⑫ $(10x^4 + 17x^3) - (14x^3 - 5x + 7x^4)$

$$3x^4 + 3x^3 + 5x$$