03A - Practice: Addition and Subtraction of Polynomials

For 1 – 4, evaluate the polynomial at the given value.

1. $5 - 3x; x = 2$	**2.** $7 - 4x; x = -2$
3. $-4x^2 - 2x + 1; \ x = -3$	**4.** $4x^2 - 5x - 2; \ x = -2$

For 5 – 14, perform the indicated operation.

5. $(8x + 1) + (7x + 2)$	**6.** $(7 - 5x) + (-2 - 3x)$
7. $(-4x^2 - 2x + 3) + (-5x^2 - 2x + 8)$	**8.** $(12x + 4) - (5x + 3)$

9. $(7x - 4) - (5x - 2)$	**10.** $(-3x^2 + 2x - 5) - (4x^2 - 6x + 1)$
11. $(4x^3 - 7x^2 + 2x - 1) + (5x - 2x^2 - 6)$	**12.** $(-5x^2 - 3x + 8) - (-4x^2 + 3x - 2)$
13. $(12x^2 - 4x - 2) - (7x^2 + 6x - 8)$	**14.** $(5x^2 - 7x + 6) - (-3x^2 - 2x + 5)$

Answers:

1.   -1   **2.**   15   **3.**   -29   **4.**   24

5. $15x + 3$ **6.** $5 - 8x$ **7.** $-9x^2 - 4x + 11$

8. $7x + 1$ **9.** $2x - 2$ **10.** $-7x^2 + 8x - 6$

11. $4x^3 - 9x^2 + 7x - 7$ **12.** $-x^2 - 6x + 10$ **13.** $5x^2 - 10x + 6$

14. $8x^2 - 5x + 1$