CHAPTER 3 Polynomials
3.6 Add and Subtract Polynomials
Adding Polynomials

Example:

a) Simplify: $(3x + 4y) + (2x - 5y)$

b) Simplify: $(2a - 3b) + (5a + 7b) + (3a - b)$

Solution:

a) $(3x + 4y) + (2x - 5y) = 3x + 4y + 2x - 5y$
$$= 3x + 2x + 4y - 5y$$
$$= 5x - y$$

b) $(2a - 3b) + (5a + 7b) + (3a - b) = 2a - 3b + 5a + 7b + 3a - b$
$$= 2a + 5a + 3a - 3b + 7b - b$$
$$= 10a + 3b$$

Practice:

1. Simplify: $(8c - 5d) + (5c + 8d)$

2. Simplify: $(2x^2 - 3x + 1) + (3x^2 + 4x + 2)$

Answers:

1. $13c + 3d$ **2.** $5x^2 + x + 3$