

Directions: use algebra tiles to solve the following:

1. $(2x - 3) + (-3x - 1) = -x - 4$
2. $(2x^2 - x + 2) + (x^2 - 2x - 1) = 3x^2 - 3x + 1$
3. $(x^2 - 3) + (3x + 5) = 3x + x^2 + 2$
4. $(3x - 4) + (-x^2 - 1) = 3x - x^2 - 5$
5. $(-3x^2 - 2x + 4) + (2x^2 - 3x + 2) = 6 - x^2 - 5x$
6. $(x^2 + 2x + 3) + (2x^2 - 2x + 1) = 3x^2 + 4$
7. $(4x^2 + 7) + (-2x^2 - 2x + 2) = 2x^2 - 2x + 9$
8. $(x - 5) + (3x^2 - 1) = x + 3x^2 - 6$
9. $(-2x^2 + 2x + 3) + (-x^2 + 4x - 3) = 6x - 3x^2$
10. $(-3x - 3) + (-2x^2 - x - 5) = -4x - 2x^2 - 8$

Directions: use algebra tiles to solve the following:

1. $(x - 3) - (4x - 2) = -3x - 1$
2. $(x^2 - 3x + 2) - (x^2 - x - 5) = 7 - 2x$
3. $(-x^2 + 11) - (3x + 5) = 6 - x^2 - 3x$
4. $(4x - 2) - (-2x^2 - 5) = 4x + 2x^2 + 3$
5. $(2x^2 - 9x + 5) - (2x^2 - 3x + 3) = 2 - 6x$
6. $(-x^2 + 2x) - (2x^2 - 4x + 5) = 6x - 3x^2 - 5$
7. $(4x^2 + 8x) - (x^2 - 2x + 2) = 10x + 3x^2 - 2$
8. $(x - 7) - (4x^2 - 1) = x - 4x^2 - 6$
9. $(-2x^2 + 5x + 1) - (-x^2 + 2x - 9) = 3x - x^2 + 10$
10. $(3x - 3) - (-2x^2 - x - 5) = 4x + 2x^2 + 2$

Directions: use algebra tiles to solve the following:

3. $(x + 2)(2x - 1) = 2x^2 + 3x - 2$

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

5. $(-4x + 1)(x - 5) = 21x - 4x^2 - 5$

6. $(-x + 4)(2x - 2) = 10x - 2x^2 - 8$

7. $(3x + 2)(x - 1) = 3x^2 - x - 2$

8. $(x + 6)(x - 2) = 4x + x^2 - 12$

9. $(-x - 2)(-x + 3) = x^2 - x - 6$

10. $(-2x + 5)(-x - 2) = 2x^2 - x - 10$