

11.3 Factoring $x^2 + bx + c$ and $x^2 - bx + c$

Objective: I CAN . . . factor quadratic trinomials of the form $x^2 + bx + c$ and $x^2 - bx + c$

Warm-Up:

a. $(x + 7)(x + 3)$

b. $(x - 6)(x - 3)$

Factoring Quadratics: Writing a quadratic expression as the product of two linear expressions

Factoring Double Bubble	
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C is Positive = Same Signs	$x^2 + bx + c$	$x^2 - bx + c$
B Determines Both Signs	$(x + \underline{\quad})(x + \underline{\quad})$	$(x - \underline{\quad})(x - \underline{\quad})$

Factor the following quadratic expressions.

1. $x^2 + 7x + 10$

2. $x^2 + 8x + 15$

3. $x^2 + 11x + 10$

4. $x^2 + 11x + 18$

5. $x^2 + 15x + 56$

6. $x^2 + 12x + 36$

7. $x^2 - 9x + 20$

8. $x^2 - 11x + 24$

9. $x^2 - 17x + 60$

10. $x^2 - 15x + 56$

11. $x^2 - 5x + 6$

12. $x^2 - 14x + 49$

11.4 Factoring $x^2 + bx - c$ and $x^2 - bx - c$

Objective: I CAN ... factor quadratic trinomials of the form $x^2 + bx - c$ and $x^2 - bx - c$

Factoring Quadratics: Writing a quadratic expression as the product of two linear expressions

Factoring Double Bubble	
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C is Negative = Different Signs	$x^2 - bx - c$	$x^2 + bx - c$
B Determines the Larger Factor's Sign	$(x - \underline{\quad})(x + \underline{\quad})$	$(x + \underline{\quad})(x - \underline{\quad})$

1. $x^2 + 3x - 10$

2. $x^2 + 3x - 18$

3. $x^2 + 4x - 12$

4. $x^2 + 7x - 10$

5. $x^2 + 3x - 54$

6. $x^2 + 4x - 5$

7. $x^2 - 8x - 9$

8. $x^2 - 2x - 48$

9. $x^2 - 5x - 14$

10. $x^2 - 4x - 21$

11. $x^2 - 4x - 12$

12. $x^2 - 8x - 9$