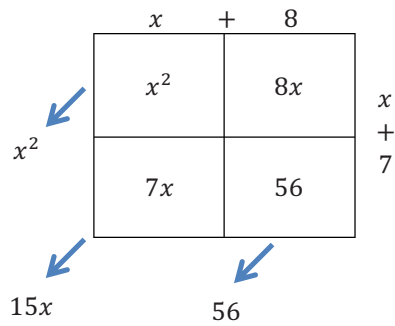


Lesson 2: The Multiplication of Polynomials

Classwork

Example 1



Use the tabular method to multiply $(x + 8) \cdot (x + 7)$ and combine like terms.

Exercises 1–2

- Use the tabular method to multiply $(x^2 + 3x + 1)(x^2 - 5x + 2)$ and combine like terms.

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2. Use the tabular method to multiply $(x^2 + 3x + 1)(x^2 - 2)$ and combine like terms.

Draw your own boxes below:

Example 2

Multiply the polynomials. See Mr. Germanis for this example question:

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What can we say about the general form $(x - 1) \cdot (x^n + x^{n-1} + \dots + x^2 + x + 1)$? What do you think will happen if the polynomial gets larger?

Exercises 3–4

3. Multiply $(x - y)(x^3 + x^2y + xy^2 + y^3)$ using the distributive property and combine like terms. How is this calculation similar to Example 2?

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4. Multiply $(x^2 - y^2)(x^2 + y^2)$ using the table and combine like terms.

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5. Repeat the question using the distribution method.



Name _____

Date _____

Lesson 2: The Multiplication of Polynomials

Exit Ticket

Multiply $(x - 1)(x^3 + 4x^2 + 4x - 1)$ and combine like terms. Explain how you reached your answer.