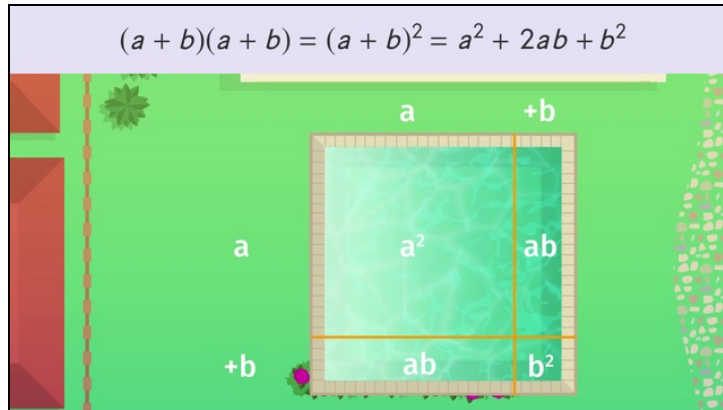




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Factoring Special Case Polynomials



- 1 Explain the FOIL method for multiplication.
- 2 Determine the area of the pool.
- 3 Calculate the area of each pool using the given values for a and b .
- 4 Calculate the different possible sizes of the rose bed.
- 5 Find the carpet sizes using the FOIL method.
- 6 Use the product of binomials to calculate 43×37 .
- + with lots of tips, answer keys, and detailed answer explanations for all of the problems.



The complete package, including all problems, hints, answers, and detailed answer explanations is available for all [sofatutor.com](https://www.sofatutor.com) subscribers.



Explain the FOIL method for multiplication.

Choose the correct statements.

- F** stands for multiply the former. **A**
- O** stands for multiply the other. **B**
- I** stands for multiply the inner. **C**
- L** stands for multiply the last. **D**
- Multiplying $(a + 2)(b + 3)$ using the FOIL method gives us $ab + 3a + 2b + 6$. **E**



Hints for solving these problems

1
of 6

Explain the FOIL method for multiplication.

Hint #1

The **F** step using the FOIL method for $(a + b)(a + b)$ is $a \times a = a^2$.

Hint #2

The **I** step using the FOIL method for $(a + b)(a + b)$ is $b \times a = ab$.



Answers and detailed answer explanations for these problems

1
of 6

Explain the FOIL method for multiplication.

Answer key: C, D, E

To explain FOIL method for multiplication, let's have a look at the following example:

To multiply the binomials $(a + 2)(b + 3)$,

- **First** - multiply the first $a \times b = ab$
- **Outer** - multiply the outer $a \times 3 = 3a$
- **Inner** - multiply the inner $2 \times b = 2b$
- **Last** - multiply the last $2 \times 3 = 6$

Adding all the results leads to $(a + 2)(b + 3) = ab + 3a + 2b + 6$.