

# Binomial Multiplication, Part One— Dynamic Algebra Tiles

Name: \_\_\_\_\_

You will multiply binomials using virtual algebra tiles.

## EXPLORE

1. Open <http://geometricfunctions.org/links/binomial-multiplication>. Tap the section heading “Binomial Multiplication Part 1.”

On page 1 of the sketch that appears, follow these steps:

- Use the algebra tiles to solve the multiplication problems that follow. Drag the orange points to model the binomial factors in each problem.
- Draw a sketch of your work, write the partial products, and find their sum.

2.  $(x + 3)(x + 3) =$  \_\_\_\_\_

3.  $(x + 2)(x + 5) =$  \_\_\_\_\_

4.  $(x + 7)(x + 6) =$  \_\_\_\_\_

Now go to page 2. Follow these steps:

- Use the algebra tiles to solve the multiplication problems that follow. Drag the orange points and the blue points to model the binomial factors in each problem.
- Draw a sketch of your work, write the partial products, and find their sum.

5.  $(3x + 3)(4x + 8) =$  \_\_\_\_\_

6.  $(5x + 4)(2x + 7) =$  \_\_\_\_\_

7.  $(2x + 5)(2x + 5) =$  \_\_\_\_\_

8. Solve a multiplication problem with two binomials factors that you choose.  
Sketch your solution below.