Simplifying Polynomial Expressions

|  |  |  |  |
| --- | --- | --- | --- |
| Algebra Expression | Algebra Tiles Representation | Algebra Expression | Algebra Tiles Representations |
| 1 |  | -1 |  |
| x | 矍햅괔숺 | -x | 矍햅괔숺 |
| x2 | 矍햅괔숺 | - x2 | 矍햅괔숺 |

Simplify the two expressions.



Simplify the two expressions with the help of algebra tiles.

**Adding and Subtracting Polynomial Expression**

Adding:



Subtracting:

Subtracting is the same as ADDING the OPPOSITE.

Step 1: SWITH the “-“ with a “+” and take the OPPOSITE of everything in the second bracket (by flipping the tiles)

Step 2: Add the two polynomials as before.



Bonus: Solve for x.

4x – 3 + 2x + 7 = 22

x = 1

x = 2

x = -1

x= 3