## Adding and Subtracting Polynomials Using Algebra Tiles

Name \_\_\_\_\_\_ Date\_\_\_\_\_

Use algebra tiles to model each addition and subtraction problem and find the sum or difference. Draw your model of each problem below the problem. Cancel zero pairs by writing an X on the tiles that cancel. Write your simplified answer in the space provided.

1. 
$$(2x^2 - 7x + 6) + (-3x^2 + 7x)$$

2. 
$$(-2x^2 + 3x) + (-7x - 2)$$

Answer:

Answer:

3. 
$$(x^2-4x)-(3x^2+2x)$$

4. 
$$(3x^2 - 5x - 2) - (x^2 - x + 1)$$

Answer:

Answer:

Is each statement below true or false? Justify your answer with a drawing. Write "True" or "False" in the space provided.

5. 
$$(3x^2 + 2x - 4) + (-x^2 + 2x - 3) = 2x^2 + 4x - 7$$

6. 
$$(x^2 - 2x) - (-3x^2 + 4x - 3) = -2x^2 - 6x - 3$$

Extend your learning and thinking by drawing, simplifying, and solving the following problem.

$$(-x^2-3x-1)-(x^2-3x-1)+(2x^2-x+1)-(x^2-x-1)+(x^2+x+1)$$