Using Algebra Tiles to Solve Equations Algebraically #2

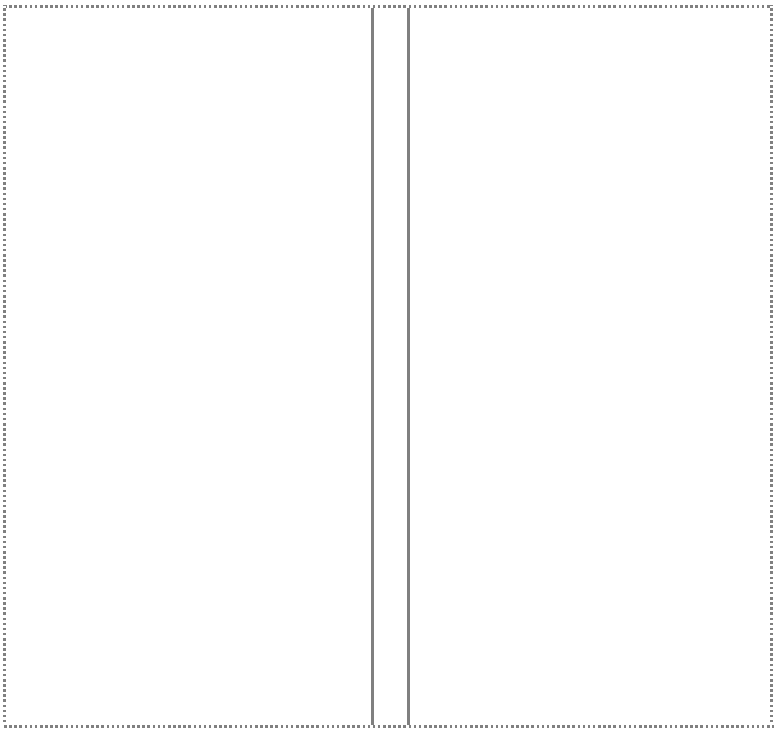
Name:

Date: Period:

Use algebra tiles to help you solve the following equations algebraically (determining the value for x that makes the equation true). Record all algebraic steps and the tile moves you make. The first step of problem #1 was done as an example.

= x = -x = 1 = -1

1. $3x + 1 = -x + 10$



Solve the following equation (for the value of x that makes the equation true) algebraically. Show (record) ***ALL*** algebraic steps. If necessary, use algebra tiles to help you visualize the steps, but you don't have to record the tile moves.

2. $5x = 3x + 4$

3. $2x = -x + 6$

4. $5x = 3x + 10$

5. $5x = 3x + (-10)$

6. $5x + 2 = 3x + (-2x) + 10$

7. $2(x + 1) = 12$

8. $-5x = -3x + 10$