## Solving Equations Using Algebra Tiles

Name $\qquad$ Date $\qquad$

| Equation | Tile Model | Written Description of <br> Procedure | Mathematical <br> Procedure <br> (Algorithm) |
| :---: | :---: | :---: | :---: |
| $x+2=3$ |  |  |  |
| $2 x-4=8$ |  |  |  |
| $2 x+3=x-5$ |  |  |  |
| $\square \square$ | $\square$ |  |  |

## Solving Equations Using Algebra Tiles - Jigsaw Puzzle 1

Name $\qquad$ Date $\qquad$

| Equation | Tile Model | Written Description of Procedure | Mathematical Procedure (Algorithm) |
| :---: | :---: | :---: | :---: |
| $2 x=-8$ |  |  |  |
|  |  |  |  |
|  |  | 1. One negative $x$ is equal to 5 . <br> 2. Take the opposite of each side of the equation. <br> 3. One $x$ is equal to five negative units. |  |
|  |  |  | $\begin{aligned} 3 x & =2+x \\ \frac{-x}{2 x} & =2^{\underline{-x}} \\ \frac{\div 2}{x} & =\frac{\div 2}{1} \end{aligned}$ |

## Solving Equations, Using Algebra Tiles - Jigsaw Puzzle 2

Name $\qquad$ Date $\qquad$

| Equation | Tile Model | Written Description of Procedure | Mathematical Procedure (Algorithm) |
| :---: | :---: | :---: | :---: |
| $2 x+1=5$ |  |  |  |
|  |  |  |  |
|  |  | 1. Three negative $x$ s and two units are the same as 5 . <br> 2. Subtract two units from each side of the equation. <br> 3 Divide both sides of the equation into two equal groups. <br> 4. Flip both sides of the equation to make them opposites. <br> 5. One $x$ is equal to one negative unit. |  |
|  |  |  | $\begin{aligned} 2 x-3 & =x+2 \\ \frac{-x}{x-3} & =\frac{-x}{2} \\ x^{\underline{+3}} & =\frac{+3}{5} \end{aligned}$ |

