## LITERAL EQUATIONS EXPLORATION

Solve each equation for $x$.

| 1. $3 x+5=17$ |  | 2. $a x+b=c$ |
| :--- | :--- | :--- |
|  | Explain each step you will <br> take to isolate $x$. |  |
|  | Are you able to simplify like <br> terms? If so, which ones? |  |
|  | Show your work here. |  |
|  | Give the solution in terms of <br> $x=$ |  |

In Equation 2, what would $x$ equal if $a=3, b=5$, and $c=17$ ?

| 3. $\frac{x}{2}-4=\mathbf{8}$ |  | 4. $\frac{x}{a}-b=c$ |
| :--- | :--- | :--- |
|  |  | Explain each step you will <br> take to isolate $x$. |
|  | Are you able to simplify like <br> terms? If so, which ones? |  |
|  | Show your work here. |  |
|  | Give the solution in terms of <br> $x=-$ |  |

In Equation 4, what would $x$ equal if $a=2, b=4$, and $c=8$ ?

What do you notice about equations with just one variable and equations with four variables?

