Literal Equations Exploration

# Solve each equation for *x*.

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

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

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

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?