Number Tricks and Solving Equations

For equations that look more complicated, your knowledge of number tricks will help you solve them.

Let’s review how to make a number trick that gives you back your original number.

* First, you build up an expression.
* Then, you \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

For example, how could you make a number trick that un-does the steps below?

|  |  |  |  |
| --- | --- | --- | --- |
| **Build Up the Expression** | | **Un-Do the Expression** | |
| Description | Example with x = 10 | Description | Example with x = 10 |
| a). Pick a # |  | h). |  |
| b). Multiply by 4 |  | g). |  |
| c). Add 8 |  | f). |  |
| d). Divide by 2 |  | e). |  |

Let’s make a number trick that builds up and then un-does the expression .

|  |  |  |  |
| --- | --- | --- | --- |
| **Build Up the Expression** | | **Un-Do the Expression** | |
| Description | Example with x = 10 | Description | Example with x = 10 |
| a). Pick a number |  | h). |  |
| b). |  | g). |  |
| c). |  | f). |  |
| d). |  | e). |  |

When we solve the equation , we follow the same steps we used to **un-do** the expression above. The only difference is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

For each equation, first list the steps needed to build up and un-do the expression. Then solve the equation.

14). 15).

16). 17).

18). 19).

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