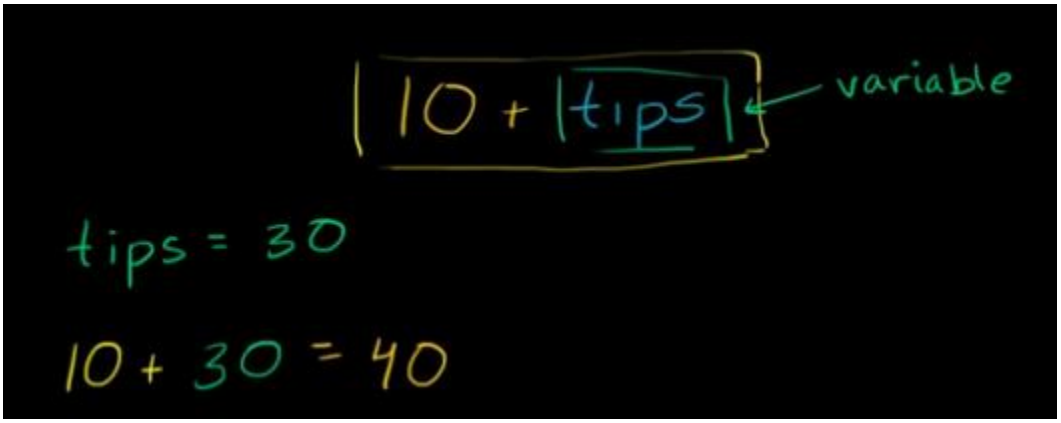
VARIABLES:

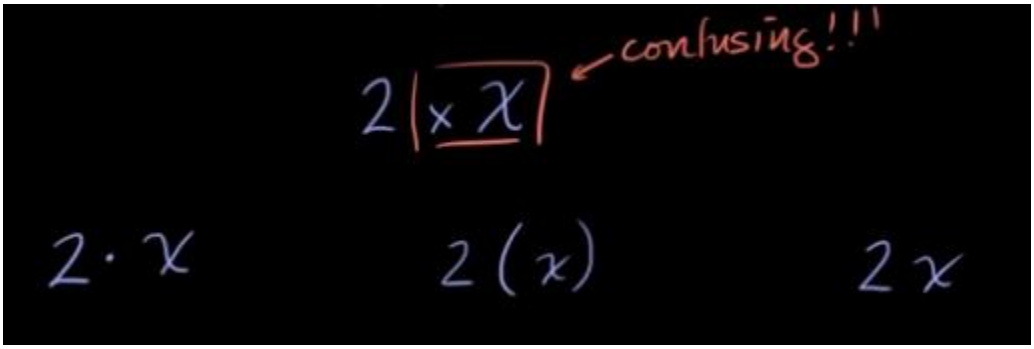
I work at a restaurant making $10 an hour.

I also make tips… the amount for tips can vary; hence “tips” is the **variable**.



Why don't we use Multiplication signs? It is redundant and potentially confusing.

For example, 2 times X:

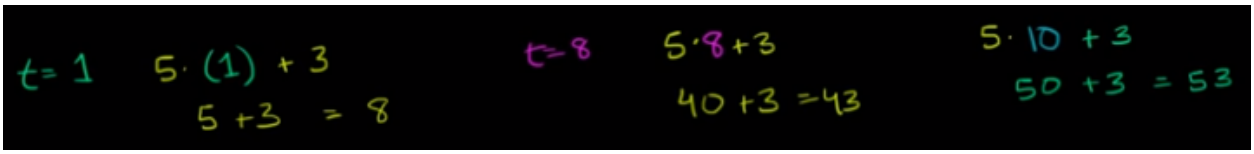


Substituting and Evaluating an **Expression** with **one Variable:**

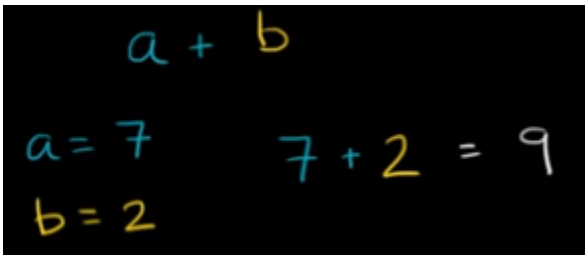
A local hospital is holding a raffle as a fundraiser. The individual cost of participating in the raffle is given by the following expression:

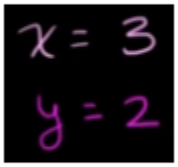
$$5t + 3$$

Where t represents the number of tickets someone purchases. Evaluate the expression when t=1, t=8, and t=10.

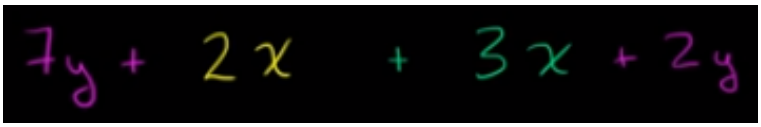


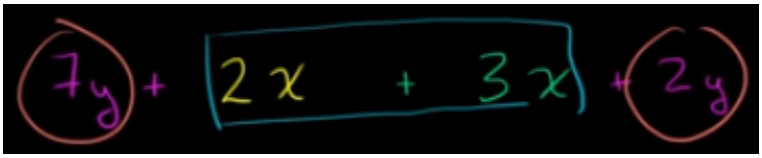
Substituting and Evaluating an **Expression** with **two Variables:**



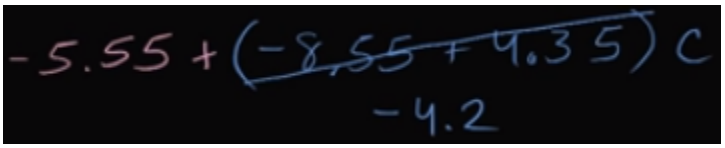


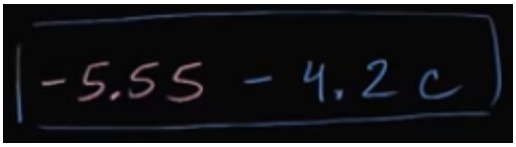
Combining **Like Terms**:



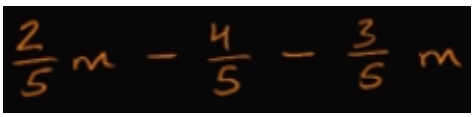


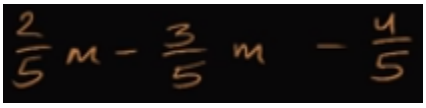
Simplifying Expressions with **Decimal Coefficients**:

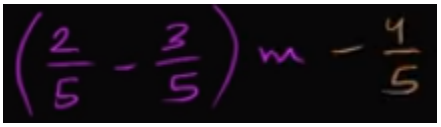




Simplifying Expressions with **Rational Coefficients**:







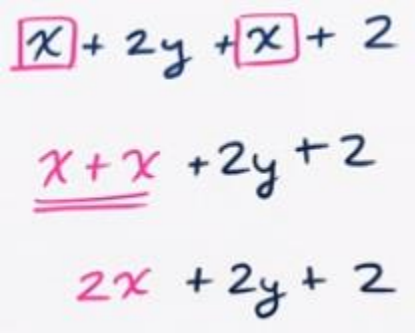
Equivalent Expressions:

Which expressions are equivalent to $x + 2y + x + 2$?

Select all that apply.

- ☐ $2(x + y + 1)$
- ☐ $2x + 4y + 4$
- ☐ None of the above

… let's combine the like terms of the example expression:



… so the right answer is:

Select all that apply.

- ☑ $2(x + y + 1)$
- ☐ $2x + 4y + 4$
- ☐ None of the above