15 Rules that Expire in Secondary Classrooms

1. " $-x$ is negative x."

2. The absolute value of a number is just the number.

3. The solution to an equation should always be written so that the variable is on the left of the equal sign, $x = \blacksquare$.

4. To check if two expressions are equivalent, you substitute 1 for the variable because that is the easiest.

5. Use cross simplifying with multiplication of fractions.

6. In the expression $3 - 2x$, the $2x$ is negative because of the $-$ sign.

7. If you have a straight line, it is a function.

8. An *x|y* table must have a set number of ordered pairs.

9. You cannot find the square root of a negative number.

10. The square root of *a* times the square root of *b* always equals the square root of *ab*.

11. When multiplying, use FOIL- First, Outer, Inner, Last.

12. To solve an equation, move numbers and letters across the magic river (equal sign).

13. Use the Magic X to factor a trinomial.

14. You cannot factor a polynomial such as $x^2 - 5$.

15. Quadratic equations always have two solutions and linear equations always have one solution

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Expired Mathematical Language

What is stated	What should be stated
Solve an expression	*Evaluate* an expression
You have to *show all your steps* when solving an equation.	*Show your thinking* (use words, diagrams, graphs and so on)
Getting *rid* of the . . . (fraction, decimal, coefficient, like term, and so on).	Using the terminology 'get rid of' assumes that the indicated quantity disappears. This action, however, should instead be linked to a property of an operation or equality.
Plugging in a value for a variable	The word 'plug' is not a mathematical term. The use of the word 'substitute' more accurately depicts the action.
Reducing a fraction	Use of the word 'reducing' often indicates something is made smaller. That is not the case with equivalent fractions. Use the word 'simplify' rather than 'reducing.'

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