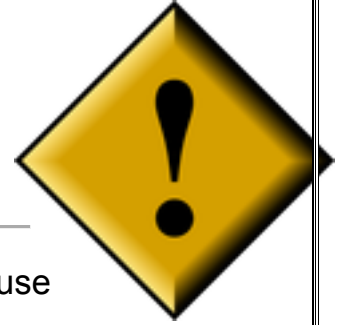


Caution Tips!

These tips will help you AVOID common mistakes!!!



1. In the expression, -5 squared, 5 is the base because the negative sign is not in parentheses. In the expression (-2) squared, -2 is the base because the negative is inside of the parentheses (1-4)
2. A number or variable or mon/polynomial divided by itself ALWAYS equals 1. For example $4m6y/4m6y$ equals 1. (2-5)
3. A scale factor between 0 and 1 reduces a figure while a scale factor greater than 1 enlarges it. (2-7)
4. You must convert a percent to a decimal or a fraction before doing any calculations with it. (2-9)
5. **Use common sense** when answering a word problem. (2-10)
6. Absolute value is a form of grouping (GEMA) and is always positive (2-Extension)
7. "no more than" means "less than or equal to" (\leq) (3-1)
8. "at least" means "greater than or equal to" (\geq) (3-1)
9. Use an inverse operation to "undo" the operation in an equation. (3-1)
10. $-5 \leq 2x + 3 \leq 9$ is an AND compound inequality because it is not linked by the word OR (3-6)
11. The phrase: "between 7 and 8" is inclusive. It can be written as $7 \leq X \leq 8$. When graphing inclusive inequalities, use a SOLID circle for the endpoints of the solutions. (3-6)
12. When sketching a graph always draw the X and Y axis (4-1)
13. Functions can be named with any letter (f, g, and h are the most common.) When writing a function (unless otherwise stated in the

- directions or problem) use the variable f . (4-3)
14. When choosing values of X to graph functions, be sure to choose both positive and negative values. You might not need to graph every point to see the pattern. (4-4)
 15. Remember: $f(x) = y$. (5-1)
 16. The graph is not always the path. For example, if time is on the X axis and distance from the city is on the Y axis, the slope of the line is negative. In reality as the time increases, the distance increases as well. With a low time value, there will be a high distance value, or vice versa. (5-2)
 17. Pay attention to the scales on the axes. One square on the grid may not represent 1 unit. (5-3)
 18. Dividing by 0 is undefined (5-3)
 19. $(X, 0)$ is the y intercept and $(0, Y)$ is the X intercept. (5-8)
 20. The perpendicular slope of a line is the negative reciprocal. (5-8)
 21. When checking systems of equations, if an ordered pair doesn't satisfy the 1st equation, you don't NEED to check the 2nd. (6-1)
 22. $0 = 0$ IS a true statement. It does not mean a system has 0 solutions or no solution. (6-4)
 23. $(0,0)$ is a good check point for systems of inequalities if it is not on the boundary line. (6-5)
 24. An ordered pair solution of a system does not need to have whole numbers, but answers to many application problems may be restricted to whole numbers. Johnny can't have 4.52 pencils in his binder! (6-6)
 25. three to the sixth and 729 are considered simplified (7-4)
 26. when using the associative and commutative properties to rearrange the terms, the sign in front MUST stay with that term. (7-6)
 27. A polynomial with M terms multiplied by a polynomial with N terms

has a product that before simplifying has MN terms. (7-7)