

Algebra 1 Honors: 2020 Summer Review/Supply List

Introduction

Hello! I am very excited to teach you this upcoming school year. Hopefully we will all be back in the classroom! Please complete the Summer Review. The Summer Review is a helpful tool that will strengthen your math skills over the summer. If you have any questions, you can email me at: acosentino@iccatholicprep.org. I will make myself available to you through email and we can also set up a Zoom meeting to help you go over any questions you may have. I look forward to seeing you in August!

Summer Review

The Summer Review will consist of 22 problems. These problems are review to material that you learned in your previous course. Please complete the entire Summer Review. **You must show your work.** If you do not show your work, you will not receive full credit. The Summer Review will be due on the first day of class. Points will be deducted from your grade if your Summer Review is not turned in on time.

Class Supplies

- Textbook: Introductory Algebra Ninth Edition, Lial, Hornsby, McGinnis, Pearson, 2010
- 1-2 Notebooks
- Loose leaf paper and graph paper
- Pencil, red pen, highlighter
- TI-84 (or plus) graphing calculator
- 1 box of Kleenex/Clorox Wipes

*You will be assessed on the summer review within the first week of class.

Algebra 1 Honors: Summer Review

Name: _____

Date: _____

Find the value of each expression. Show all work. Simplify your answer when necessary. (2 points each)

1. $5 - 4 \cdot 6 + 4 \div 2$

2. $4^2 - (-5)^2 + (-4)(7)$

3. $\frac{-(4-7)+6(-4)}{|4|+6|-8|}$

4. $\frac{6}{7} \left[\frac{2}{3} + 18 \left(\frac{1}{3} \right)^2 \right]$

5. -4^3

6. $\frac{-7-|-5-3|}{-8+6}$

7. $\frac{2(8-2) + 7(9-5)}{4^3 - (8-5)}$

8. $(-6)^2$

Find the value of each expression if $a = 4$ and $b = -2$. Show all steps needed to solve. Simplify your answer when necessary. (2 points each)

9. $\frac{a-|6b|}{a}$

10. $\frac{a-b}{-b^2}$

11. If a is negative, is $-|-a|$ positive or negative? Use reasoning to explain how you know. (1 point)

Translate each phrase into an algebraic expression, using x as the variable. Combine like terms when possible. (1 point each)

12. 4 more than eight times a number

13. Write the expression $8(x - 3)$ in words.

14. The quotient of 5 more than a number and 2

Translate each sentence to an equation, using x to represent the number. (1 point each)

15. The quotient of a number and 6 is -4.

16. 6 less than 5 times a number is -4.

17. Three subtracted from five times a number is 12

Simplify the following. (2 points each)

18. $4x - (x + 6) =$ → solve for x when $x = -2$

19. $4(x - 3) + 3(2x + 6)$

Properties of Real Numbers (1 point each)

20. $2 + (x + y) = (2 + x) + y$ is an example of which property (or properties) of the real numbers?

21. Is the following an equation or expression: $4x - \frac{5}{8}$

22. Simplify $6(x - 3) - 6(x^2 + 5x) - 10$ by using the distributive property and combining like terms. (2 points)