

Geometry Enhanced: 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 29 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: Geometry, McGraw-Hill – Glencoe, 2014
- 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.

Geometry Enhanced: Summer Review

Name: _____

Date: _____

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

1. Evaluate $3x^2 - x + 4$, when $x = -2$ _____

2. Use the order of operations to evaluate.
 $4[20 - (3 - 6)^2]$ _____

3. Translate the following into an equation or inequality. _____

“Four subtracted from five times a number is 12”

Solve the equation.

4. $4(2x + 6) = 72$ _____

5. $4x - 5(3x + 7) = -5x - 77$ _____

6. $\frac{25}{5} = \frac{3x}{6}$ _____

7. Solve for y: $8x - 4y = 36$ _____

8. Find the slope of the line: (4, 6) and (-8, -6)

Solve the system of linear equations.

9. $y = 5x + 9$
 $6x + y = 31$

x= _____

y= _____

Solve the inequality by finding the value of x.

10. Solve $-8(x - 7) \geq -8$

Simplify the expression. Write your answers as a power. Evaluate all coefficients. Assume all variables are positive and write your answers with positive exponents only.

11. $(x^3)^4 \cdot (-4x)^3$

12. $(8y)^3 \cdot (-4y)^2$

Solve for x, then use the value of x to find the additional answers.

$$\begin{aligned} 13. \quad A &= 3x + 12 \\ B &= 16x - 27 \end{aligned}$$

$x = \underline{\hspace{2cm}}$

$A = \underline{\hspace{2cm}}$

$B = \underline{\hspace{2cm}}$

Subtraction of integers. Simplify and show your work.

$14. \quad -33 - (-19)$

$\underline{\hspace{2cm}}$

$15. \quad 23 - (-17)$

$\underline{\hspace{2cm}}$

$16. \quad -18 - 16$

$\underline{\hspace{2cm}}$

Factor completely.

$17. \quad x^2 - 9x + 20$

$\underline{\hspace{2cm}}$

$18. \quad x^2 - 36$

$\underline{\hspace{2cm}}$

$19. \quad b^2 - 11b + 24$

$\underline{\hspace{2cm}}$

Solve by combining like terms.

20. $(2b^3 - 4b - 7) - (2b^3 + b + 9)$

Simplify Square Roots

21. $\sqrt{49}$

22. $4\sqrt{96}$

Which quadrant is each point located in?

23. $(-3, 5)$

24. $(5, 10)$

25. $(4, -11)$

26. $(-12, -9)$

27. $(1, 8)$

28. $(-9, -6)$

Bonus Question

29. What is something that you are looking forward to this upcoming school year?
