Robbinsville High School
Mathematics Department
155 Robbinsville-Edinburg Road
Robbinsville NJ 08691

Dear Students,

Welcome to Geometry! Attached you will find a summer packet for math reinforcement for the upcoming 2020-2021 school year. This packet should be completed and returned to school on the ***first full day of school***. September is filled with review, but with completion of this packet, the review will come very naturally. The packet will be ***collected*** and ***graded*** as **a 20-point *homework grade*** based on ***completion*** and ***effort***.

To assist in your review and completion of this packet there are videos corresponding to each section of this packet. The videos are linked into this packet using QR codes that look like this: 
In order to view the videos, simply download a QR scanner to your phone, use the scanner to scan the code, and that will directly link you to each video.

If you find yourself still confused on certain topics, it is suggested that you search for the topic on one of the following websites:

- ShowMe http://www.showme.com
- Khan Academy: http://www.khanacademy.org/Math
- Math TV: http://www.mathtv.com

We look forward to teaching you and getting to know you next year.
Have a great summer!
Robbinsville High School Mathematics Department

Name_____

Due Date: The first day back in your Geometry Class!

Directions: You must also show all work in the space provided to receive credit. Write your final answer on the line.

Part 1: Algebra 1 Skills

Solve by Distribution:

1. $-3(x + 5) = 8x + 18$ 1._____

2. $4(8 - p) - (7 - p) = 22$ 2._____

3. $5(x - 4) - 1 = -7x + 3$ 3._____

4. $10(v + 5) = 10v + 50$ 4._____

Solve by Cross Multiplication:

5. $\frac{x+1}{-3} = \frac{x-4}{5}$ 5._____

6. $\frac{5}{x-1} = \frac{7}{x}$ 6._____

Solve by Factoring:

7. $x^2 - 16x + 64 = 0$ 7._____

8. $2x^2 = 9x + 5$ 8._____

Solve by Factoring Two Perfect Squares:

9. $25y^2 - 49 = 0$ 9. _____

10. $16x^4 - 121x^2 = 0$ 10._____

Solve by Using the Greatest Common Factor:

11. $2x^4 - 12x^2 = 0$ 11._____

12. $3xy - 15y = 0$ 12._____

Simplify:

12. $(2x^2 + 11xy - 10) + (3x^2 - 4x + 2) + (-x^2 - y - 4)$ 12._____

13. $(2x^2 + 5x - x^3 + 1) - (9x^2 - 8x - x^3 + 7)$ 13._____

Foil:

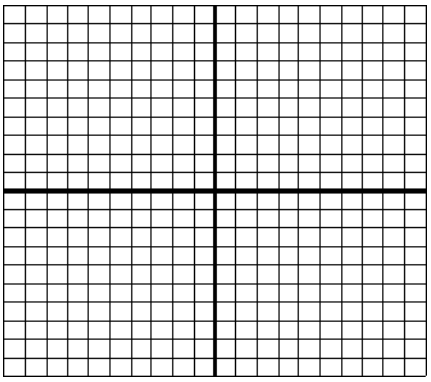
14. $(4a + 5c)(4a - 5c)$ 14._____

15. $(w - 2)^2$ 15._____

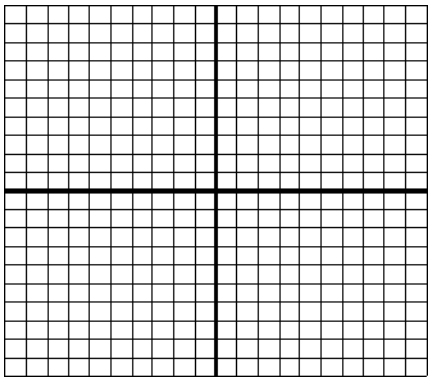
16. $(q + 3)^3$ 16._____

Graph the Functions:

17. $y = -3x + 5$



18. $y = \frac{3}{4}x - 2$



Find the Slope.

19. Find the slope of the line containing points (9, 4) and (5, 2) 19._____

20. Find the slope of the line containing points (-2, 3) and (8, -15) 20._____