Fairfield College Preparatory School
Intro to Pre-Calculus

Summer Assignment

Gentlemen,

In preparation for your Pre-Calculus class next year, you are required to complete the following packet by the first full day of classes,

This assignment will be posted on the Fairfield Prep website under "Summer Assignments."

Make sure to **SHOW ALL STEPS** and place your answer on the line provided.

This assignment covers topics that you have covered over the past few years in Algebra and Geometry. If you are struggling with a particular topic, use the countless resources available on the internet.

https://www.khanacademy.org/

Please show all work directly on this packet and print it out for the first day of class. Make sure to show all work, and box your final answers. The assignment will be checked and corrected. Enjoy your summer!

The Math Department

Fairfield College Preparatory School
Pre-Calculus

Summer Assignment

1. Evaluate each expression using order of operations:

a. $2 + 12 \div 2 + 1$

b. $-4 - (1 - 5) - (-4)^2$

c. $((-16 - (-2 + 1)) \times 2) \div 5$

2. Combine Like Terms:

a. $4x^2 + y^2 + x + 5y^2$

b. $-4x(x - 1) - (-x + 5)$

3. Evaluate each expression using the values given:

a. $y + z + 2$; use $y = -6$, and $z = 5$

b. $z - (y + x^2)$
use $x = -4, y = -14$, and $z = 2$

c. $p(q \div 3 - p)$; use $p = -6$, and $q = -3$

4. Find the slope for a line passing through the points (1, 4) and (3, 2).

5. Write an equation of a line that goes through the points (-3, 5) and (-1, 7).

6. Solve the following equations algebraically without a calculator. Show all of your work.

a. $-12 = 2 + 5v + 2v$

b. $2(5-2y)-3(1-y)=y+1$

c. $3(x-2)=5(x-1)$

d. $\frac{5}{y}+\frac{4}{y}=3$