

CV | Pre Calc

Chapter 0 – REVIEW

NAME Key

Simplify. (3 points each)

1. $(-2-i)^2$

$$\boxed{3+4i}$$

2. $(5+3i)(2+6i)$

$$\boxed{-8+36i}$$

3. $(-5-i)(6i+1)(7-i)$

$$\boxed{-24-218i}$$

Solve the system of equations.

4.

$$6x+2y+4z=2$$

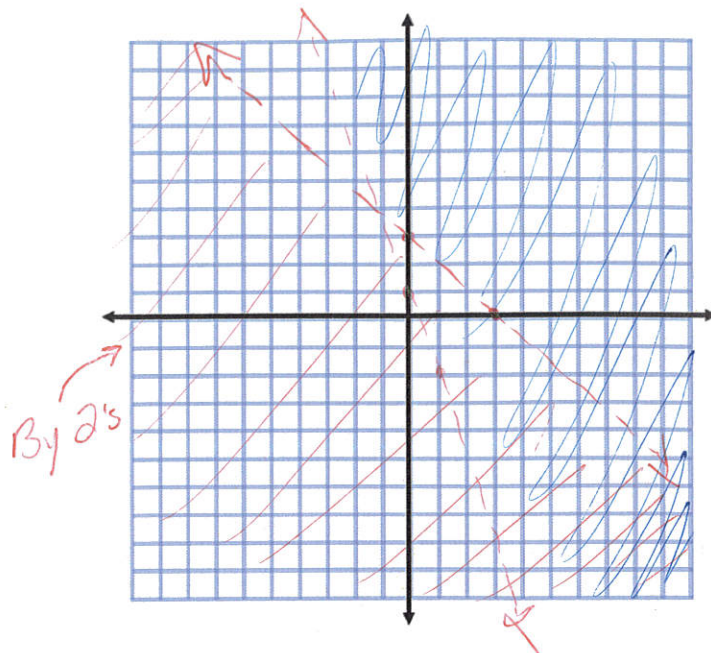
$$3x+4y-8z=-3$$

$$-3x-6y+12z=5$$

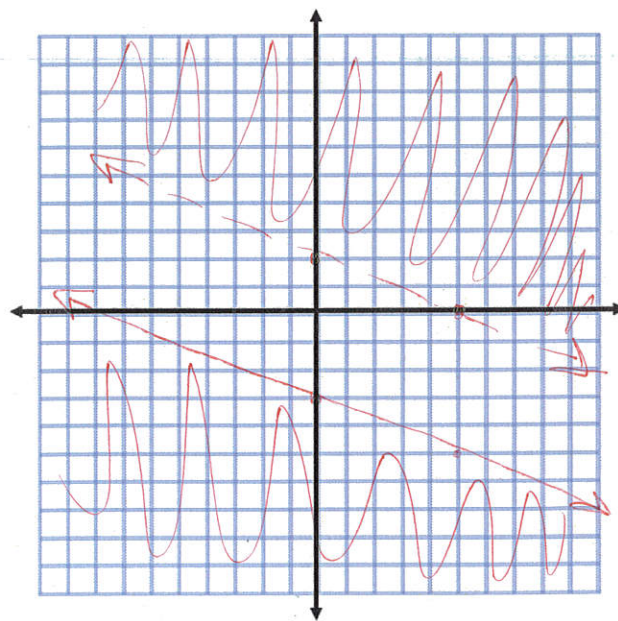
$$\boxed{\left(\frac{1}{3}, -\frac{1}{2}, \frac{1}{4}\right)}$$

Solve each system of Inequalities.

7. $y+x < 6$
 $y > -3x+2$



8. $2x+5y \leq -15$
 $y > -\frac{2}{5}x+2$



Find each permutation or combination. (2 points each)

9. ${}_6C_6$ 11

10. ${}_8P_4$

1680

11. ${}_8C_4$

70

12. Four cards are randomly drawn from a standard deck of 52 cards. Find the probability. (2 points)

P(2 odd and 2 face cards)

$\frac{2508}{54,145}$

 or about 4.6%

13. Find the mean, median, mode, range and standard deviation for the population. (5 points)

0.8, 0.9, 0.4, 0.8, 0.6, 0.8, 0.6

Mean = 0.7

Median = 0.8

Mode : 0.8

Range : 0.5

Variance : 0.26

S.D. : 0.16