Paint Branch High School
Summer Preview Packet

Bridge to Algebra Two

Directions: Clearly show all work in the space provided. You may use previous notes from math classes, books, and the internet, but do this independently without the aid of parent, guardian, friend, or tutor. Please have this ready to turn in to your teacher by the first Friday of the school year. This will count towards your grade for the first quarter.

Name: _____

Geometry Teacher: _____

Algebra One Teacher: _____

Perform the following operations and give the answer in simplest form. Remember to show your work. Circle your answer.

1. $\frac{2}{3}+\frac{1}{2}$ =

2. $\frac{5}{6}-\frac{1}{4}$ =

3. $2\frac{1}{4} \bullet \frac{2}{9}$ =

4. $\frac{2}{5} \div \frac{1}{10}$ =

5. -5 – (4 + 7) =

6. 3 { 2(5-9) – 4 (7-15)} =

7. For the equation y = -3x + 4, complete the following table of values:

x	y
-2	
0	
2	
3	

Simplify each expression completely. Circle the answer.

8. 5x – 4y + 2x + 7y

9. $3x^2 - 8x + 5 - x^2 + 3x$

10. 4x + 8 – (2x – 3)

11. 3(2x + 5) – 2(x+1)

12. $5x^3 \bullet 2x^4$

13. $\frac{27x^6}{9x^2}$

Solve the following equations. Circle your solution. Show by substitution that your solution is correct.

14. $\frac{2}{3}x - 8 = 20$

Check:

15. $2x - 9 = 6x + 3$

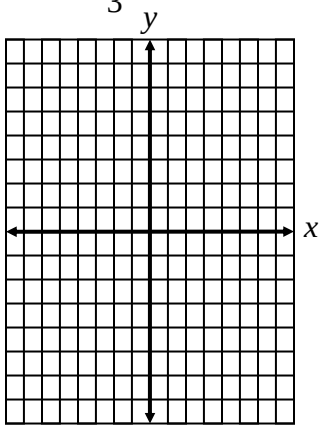
Check:

16. $4(2x - 3) + 2(x - 8) = 32$

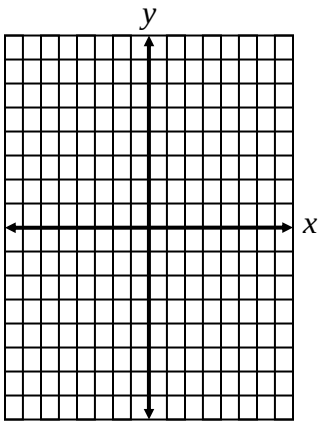
Check:

Graph the following linear functions.

17. $y = -\frac{2}{3}x + 3$



18. $y = 2x - 4$



19. If a line passes through the points (-3, 4) and (-6, -8), what is the slope of the line?

(Hint : Use the slope formula m = $\frac{y_2 - y_1}{x_2 - x_1}$.)

20. Solve the inequality and graph the solution on the number line.

2x – 6 < 3x + 9