



7th Grade Algebra Summer Packet

1. Due the first day of school!.
2. All problems must be done with all work shown.
3. You can do your work on these papers.
4. Do NOT erase anything that is written down!
5. You must be neat!
6. This assignment will be graded and is considered the 1st. Assignment of the school year.
7. Should you have any questions, please contact Mr. Santora, or Mrs. Santoiemmo at:

jsantora@grossschechter.org
ssantoiemmo@grossschechter.org

Have a great summer!!!!

We are looking forward to a productive and fun math year!

Math Teachers

Algebra Summer Math Packet

Solve the following equations:

****Circle your answers****

1. $6 - x - 3 = -x + 3$

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

3. $3 + 3x - x + 2 = 3x + 4$

4. $5y + (-y - 2) = 4 + y$

5. $\frac{1}{6}x + \frac{2}{3}x = 5$

6. $\frac{x}{2} + \frac{4x}{3} = 2x - 1.5$

7. $\frac{x}{3} = 8$

8. $3(5x - 7) = 5x - 1$

9. $-7(2x - 10) = 4x - 10$

Solve each system of equations:

****Circle your answers****

10. $y = \frac{x}{6} + \frac{1}{4}$
 $y = x - \frac{9}{4}$

11. $y = 32x + 16$
 $y = 80x + 4$

12. $y = \frac{x}{2} - 1$
 $y = \frac{x+3}{12}$

Evaluate the expression

****Circle your answers****

13. $2^5 \cdot 2 - 4 \div 2$

14. $24 \div 6 + (9 - 6)$

Write an equation of the line given the slope and y-intercept:

****Circle your answers****

15. slope: 5
y-intercept: -1

16. slope: -1
y-intercept: 3

Write the equation of the line that passes through the given points: ***Circle your answers***

17. (-1,1), (1,-3)

18. (-9,-2), (-6,8)

19. (2,4), (8,2)

On the graph paper provided, graph the following equations:

20. $x + 2y = -8$

21. $3x - 4y = 12$

22. $y = 3x - 7$

23. $y = x + 6$

Solve the inequality. Then graph your solution on a numberline: ***Circle your answers***

24. $4x - 10 \leq 7x + 8$

25. $-4 < 3x - 1 < 5$

Simplify. Your answer should contain only positive exponents:

Circle your answers

26. $(x^4)^{-3} \cdot 2x^4$

27. $(2x)^2 \cdot 2x^2$

28. $\frac{2x^2 y^0 \cdot 4x^2 y^4 \cdot 3x}{3x^{-3} y^2}$

29. $\frac{x^3 y^3 \cdot x^3}{4x^2}$

30. $\frac{2m^{-4}}{(2m^{-4})^3}$