

Full Name: _____

Letter Grade / % Grade _____ Quarter 3: _____ Quarter 4: _____

Algebra 1: 2026-2027

Accelerated Math Summer Review Packet

Directions:

1. This packet reviews the foundational skills you will need for success in Algebra 1.
2. Complete this packet and be prepared to turn it in on the first day of class.
3. When solving multi-step equations and inequalities, all steps of logical reasoning should be shown, and your final answer must be **boxed**. See the following example:

$$\text{Given: } 11 = \frac{4}{5}h - 1$$

$$5(11 = \frac{4}{5}h - 1)$$

$$55 = 4h - 5$$

$$\frac{60}{4} = \frac{4h}{4} \Rightarrow \boxed{h = 15}$$

4. Feel free to use additional paper when needed. Label problems completed on additional paper with the page and problem number. Submit any additional paper used with your packet.
5. You are encouraged to work with peers and use additional resources (for example, MagicSchool AI) to complete your work. All work, however, should be completed in your own hand.
6. Always write your first and last name on submitted work.
7. If you have questions, you are welcome to reach out to me at: slaahs@susd.org. Please plan to allow a few days for a response.
8. Have a great summer, and I look forward to working with you this year in Algebra 1!!

Name: _____

Directions: Evaluate each expression for the given variable values.	
1. $n^2 - 3n + 8$ if $n = 4$	2. $\frac{x^2 - 4y}{2}$ if $x = 4$ and $y = -3$
3. $4 m - n $ if $m = -7$ and $n = 2$	4. $19 - x^2$ if $x = -5$
5. $s^2t - 10$ if $s = -8$ and $t = \frac{3}{4}$	6. $4p^2 + 7q^3$ if $p = -3$ and $q = -2$
7. $\frac{(a+b)^5}{a-2b^2}$ if $a = 6$ and $b = -8$	8. $\frac{5c^2 - d^2 + 3}{2c - 4d}$ if $c = -1$ and $d = -4$
9. $-q^2 - r^2 + 3s$ if $q = 9$, $r = -6$, $s = -20$	10. $3 x + y ^2 - (xy)^2$ if $x = 3$ and $y = -5$
11. $2x^2 - 5xy - y^3$ if $x = -3$ and $y = -2$	12. $-a^2 + 7b^4 - 2c^3$ if $a = -4$, $b = -2$, $c = -3$

Name: _____

Directions: Simplify each expression by combining like terms.

1. $8y - 9y$

2. $3x - 7x + 1$

3. $8a - 6 + a - 1$

4. $-2y + 14 - 9y + 5$

5. $-x - 2 + 15x$

6. $-7w - 5 - 7w + 9$

7. $8d - 4 - d - 2$

8. $40 - 9x + 4x + 5$

9. $9a + 8 - 2a - 3 - 5a$

10. $4xy - 6xy + 5y - 9x$

11. $7x + 2y + 5 - 5x + 9y - 1$

12. $-5f - 7g + f - 5g - 4 + f$

13. $-6 + 3a - b - 4a + 4b + 5$

14. $6n^2 - 2n - 3 + 5n^2 - 9n - 6$

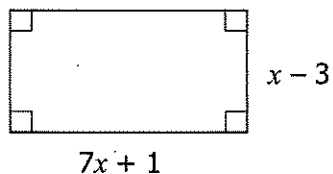
15. $8c^2 - c + 3 + 2c^2 - c + 2$

16. $-12x^2y - 3x^2y$

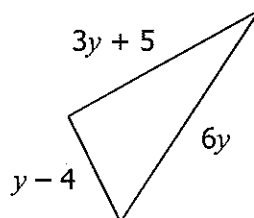
17. $6a^2b^2 + 3ab^2 - a^2b^2 - 4ab^2$

18. $19x^2y - 4xy^2 + 5xy^2 - 16x^2y$

19. Write the perimeter of the rectangle as a simplified expression.



20. Write the perimeter of the triangle as a simplified expression.



Name: _____

Directions: Simplify each expression by distributing.	
1. $8(x + 5) =$ _____	2. $3(2y - 7) =$ _____
3. $-2(3m + 9) =$ _____	4. $-6(z - 1) =$ _____
5. $-(5x + 1) =$ _____	6. $-(x + 4) =$ _____
7. $b(a - 6) =$ _____	8. $7a(3b - 2c + 4) =$ _____
9. $\frac{1}{2}(8x + 2) =$ _____	10. $\frac{2}{3}\left(\frac{1}{4}x - 6\right) =$ _____

Directions: Simplify each expression by distributing and combining like terms.	
11. $-7(w - 4) + 3w - 27$	12. $6(x + 1) - 5(x + 2)$
13. $-5(k + 6) + 7(k - 4)$	14. $8(x + 5) - 4(x + 4)$
15. $-9(m + 2) + 4(6 - 7m)$	16. $-3(-9v - 4) - 2(v - 2)$
17. $-4(8 - c) - (3c + 7)$	18. $6(p + 6) - (p - 6)$
19. $21 - 8(w + 3) + 3 + 7w$	20. $\frac{1}{2}\left(\frac{3}{5}x - 8\right) + \frac{7}{4}\left(\frac{2}{5}x + 4\right)$

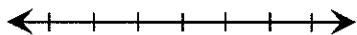
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Directions: Solve each equation. SHOW ALL STEPS!		
1. $y - 17 = -37$	2. $-12 + k = 18$	3. $5m = -20$
4. $\frac{x}{9} = 3$	5. $\frac{4}{5}z = 16$	6. $3p - 4 = 11$
7. $-5a + 7 = -38$	8. $31 - 12n = 211$	9. $\frac{x}{3} - 15 = -7$
10. $\frac{f}{-4} + 11 = 5$	11. $\frac{4}{3}v + 25 = 33$	12. $\frac{5}{8}c + 13 = 18$
13. $-\frac{2}{3}w + 53 = 59$	14. $11 = \frac{4}{5}h - 1$	15. $-\frac{3}{8}r + 41 = -22$
16. $34 = 28 - \frac{2}{5}y$	17. $\frac{n+4}{-2} = -9$	18. $-5 = \frac{x-1}{8}$

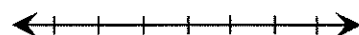
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Directions: Solve and graph the following inequalities. **SHOW ALL STEPS!**

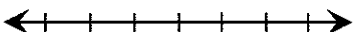
1. $3x + 1 < 10$



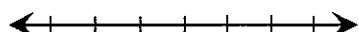
2. $\frac{x}{3} + 10 \geq 15$



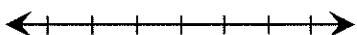
3. $-2x + 22 < 18$



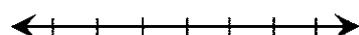
4. $7x + 11 > -31$



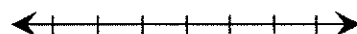
5. $\frac{x}{5} - 3 \leq 6$



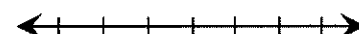
6. $18 - 2x > 4$



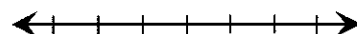
7. $\frac{x}{-2} + 1 > 4$



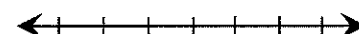
8. $4 - \frac{x}{7} \leq 5$



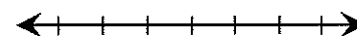
9. $-3x - 4 < 8$



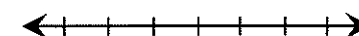
10. $\frac{5}{8}x - 1 \geq 9$



11. $-\frac{3}{4}x + 2 > 11$



12. $\frac{x+15}{-3} > -7$



TRANSLate... AND Solve!

1		2	
"Twice a number plus 4 is 8"		"The product of 4 and a number plus 17 is 5."	
3		4	
"Twice a number minus 5 is 7"		"The quotient of a number and 6 minus 3 is 1"	
5		6	
"Two more than 4 times a number is -18"		"Seven less than twice a number is 5"	
7		8	
"Five less than the quotient of a number and 3 is -7"		"One subtracted from the product of 4 and a number is 11"	
9		10	
"The quotient of a number and -9, increased by 10 is 11"		"Half of a number decreased by 8 is -3"	

11	"The sum of three-fourths of a number and 1 is -5"	12	"Ten minus one-third of a number is 4"
13	"Four more than the quotient of a number and 3 is at least 9"	14	"Negative three times a number increased by seven is less than -11"
15	"Seven more than one-sixth of a number is greater than three"	16	"The sum of 5 and the twice a number is at most 27"
17	"Four less than two-fifths of a number is no less than 2"	18	"Three-fourths of a number decreased by 10 is greater than or equal 5"
19	"The quotient of a number and -5, increased by 7 is at minimum 1"	20	"One less than half a number is a maximum of 19"

good job!