

Algebra 2 Academic – Summer Assignment

Attached is the summer assignment for students who will be taking Academic Algebra 2 during the 2019-20 school year.

Please print out the assignment and complete all work on these pages. Work must be shown to receive credit.

Point value: 40 points

Due date: Early submission (five extra points awarded) - first day of school
 Regular submission – September 3, 2019

The Algebra 1 topics included in the review are:

- Order of Operations
- Simplifying Numerical Expressions
- Evaluating Algebraic Expressions
- Absolute Value
- Solving Equations
- Calculating slope

When completing the assignment:

- Do the work independently. You may refer to online resources or your material from Algebra 1 but do not ask a friend for help.
- Use pencil.
- Show all your work.
- Do not use a calculator.
- Contact me at kleandri@thsrocks.us if you have any questions regarding the assignment. I will get back to you as soon as possible.

I look forward to meeting you in August. We will be using a graphing calculator throughout the year. I suggest the TI-84 (any series) if you wish to purchase one prior to the start of school. Have a great summer!

Mrs. Leandri

Name _____

Date _____

Summer Assignment – Algebra 2A

Evaluate each expression.

1. $12 + 6 \div 3 - 2(4)$

2. $(7 - 3^2)^2 + 6^2$

3. $7 - (4 - 2)^3 + 6$

4. $\frac{5 - 3^2 + 8}{8 - 4 \cdot 2}$

Evaluate each expression for $a = 8$, $b = -3$ and $c = 4$

5. $ac - bc$

6. $(b - c)^2 + 4a$

7. $b - c + 4 \div a$

8. $\frac{a + c}{b} - 10$

Simplify each expression.

9. $40x + 18y - 5y + 11x$

10. $4(10g + 80h) - 20(10h - 5g)$

11. $3a + 5c + 2a - 3c$

12. $3(x - w) + 5(2x - 4w)$

Solve each equation.

13. $3x - 4 = 49$

14. $5(x - 1) = 6(x + 7) + 4$

15. $5(4 - x) = -10x$

16. $3x + 17 = 10 - 5(x - 3)$

Evaluate each expression if $w = -4$, $x = 2$ and $y = \frac{1}{2}$

17. $|2x - 8|$

18. $|x + 5| - |2w|$

19. $23 - |7wy|$

20. $|2x - y| + 5y$

Use the slope formula: $m = \frac{y_2 - y_1}{x_2 - x_1}$ to find the slope of the line passing through the given two points.

21. $(12, -7), (10, 9)$

22. $(-8, 5), (3, -5)$

23. $(2, 6), (-3, -7)$

24. $(4, -11), (4, -9)$