Lawrence High School’s Algebra I Optional 2019 Summer Assignment
Directions: This is an OPTIONAL Algebra 1 Summer Assignment that will help you to be best prepared for your scheduled math class in September.

- It would be best to complete ALL problems.
- Show all your neat and organized work for every problem.
- Be sure your name is on each additional work page.
- You may choose to turn this into your teacher the first full week of school for consideration for extra credit.

Resources: You have your notes and handouts from 8th Math and your Go Math text. For additional examples and support you can reference any of the sites listed below and search the skill/concept.

- KhanAcademy.com
- You Tube.com or Teacher Tube.com
- MathIsPower4u.com
- IXL.com
Algebra 1 Summer Assignment 2019

Evaluate each expression.

1) \((13 - 1) \div (2 + 1)\)

2) \((7 + 15 - 4) \div 3\)

3) \(6 + 4^2 + (5)(5)\)

4) \(1 - (5 - (6 - 1)) + 2\)

Evaluate each using the values given.

5) \((5 - z)(y + x)\); use \(x = 5\), \(y = 5\), and \(z = 3\)

6) \(((q)(p + p^2)) \div 4\); use \(p = 4\), and \(q = 2\)

Simplify each expression.

7) \(1 - 4a - 9 + 7a\)

8) \(-5x + 10x\)

9) \(-10(10m + 2)\)

10) \(8(x + 3)\)

11) \(2n - 7(-2n + 9)\)

12) \(10(v - 9) + 7v\)
Solve each proportion.

13) \( \frac{10}{4} = \frac{7}{8n} \)  
14) \( \frac{n}{9} = \frac{3}{8} \)

15) \( \frac{n}{2} = \frac{7}{4} \)  
16) \( \frac{v}{7} = \frac{6}{8} \)

Solve each equation.

17) \( p - 19 = -22 \)  
18) \( -7 + x = -22 \)

19) \( -8r = 16 \)  
20) \( \frac{p}{12} = 14 \)

21) \( \frac{-10 + x}{15} = -1 \)  
22) \( -5(b - 8) = 85 \)

23) \( 6p - 3 = 51 \)  
24) \( \frac{a}{2} - 9 = -16 \)
Solve each inequality and graph its solution.

25) \( m - 10 \leq -25 \)

26) \( -2n > -16 \)

Sketch the graph of each line.

27) \( y = -\frac{1}{4}x - 1 \)

28) \( y = -2 \)

29) \( y = -2x \)

30) \( y = 5x - 3 \)