Extra Credit Assignment for September

<u>Directions</u> – This is an optional extra credit assignment. If it is completed correctly, you may earn 5 extra credit points to be applied to a test or quiz. If you choose to complete this extra credit assignment, please complete **ALL** questions from your grade. **ALL** work must be shown in order for your answer to count. This extra credit assignment must be submitted to Mrs. Wilson by **September 30, 2023**.

Grade 5

Question 1 – Convert 2023 into Roman Numerals.

Question 2 – Add. Show all work.

2,850,000,271 + 7,291,024,539 =?

Question 3 – Subtract. Show all work.

7,000,500,030 - 2,010,900,452 =?

Grade 6

Question 1 – You have 16 yellow beads, 20 red beads, and 24 orange beads to make identical bracelets. What is the greatest number of bracelets that you can make using all the beads?

Question 2 – Hamburgers come in packs of 20, while buns come in packs of 12. What is the least number of packs you should buy in order to have the same number of hamburgers and buns?

Question 3 – The coach of a baseball team separates the players into groups for drills. Each group has the same number of players. Is the total number of players on the baseball team prime or composite? Explain how you know.

Grade 7

Question 1 – Solve the formula for b.

$$A = \frac{1}{2} \cdot h(b+B)$$

Question 2 – Solve the equation for L. Simplify if possible.

$$A = \frac{1}{2} \cdot \pi w^2 + 2Lw$$

Question 3 – The formula $K = \frac{5}{9}(F - 32) + 273.15$ converts temperatures from Fahrenheit F to Kelvin K.

- **a.** Solve the formula for F.
- **b.** The freezing point of water is 273.15 Kelvin. What is this temperature in Fahrenheit?

Grade 8

Question 1 – The vertices of a quadrilateral are A (-5,0), B(1,4), C(3,1), and D(-3,-3).

- **a.** Determine the slope of each side of the quadrilateral.
- **b.** Is this quadrilateral a rectangle, parallelogram, trapezoid? Explain how you know.

Question 2 – Solve the absolute value equation. Show all work.

$$-7 \cdot |9 - 2x| + 9 = -12$$