Extra Credit Assignment for October

<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 **October 31, 2023**.

Grade 5

Question 1 – Seven ticket agents sold 4662 tickets. Each agent sold the same number of tickets. How many tickets were sold by each agent?

Question 2 – There were 12,744 people who attended the 6 performances of a play presented by a theater guild. If an equal number of people attended each of the performances, how many people attended each performance?

Question 3 – A vendor packs 782 apricots in 6 cases. Each case holds the same number of apricots. How many apricots are in each case? How many apricots are left over?

Grade 6

Question 1 – The expression 15a + 12c is the cost (in dollars) of admission at an amusement park for a adults and c children. Find the total cost for 5 adults and 10 children.

Question 2 – To rent a moving truck for the day, it costs \$33 plus \$2 for each mile driven.

- **a.** Write an expression for the cost to rent the truck.
- **b.** You drive the truck 300 miles. How much do you pay?

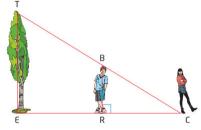
Question 3 – Simplify the expression.

$$4x + 9y + 3(x + y)$$

Grade 7

Question 1 -

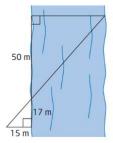
To measure the height of a tree, Cynthia has her little brother, BR, stand so that the tip of his shadow coincides with the tip of the tree's shadow, at point C.



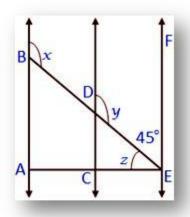
Cynthia's brother, who is 1.2 m tall, is 4.2 m from Cynthia, who is standing at C, and 6.5 m from the base of the tree. Find the height of the tree, TE.

Question 2 -

Use the dimensions of the surveyors' triangles to find the width of the river, to the nearest metre.



Question 3 – Determine the measures of angles x, y, and z.



Grade 8

Question 1 – Members of a movie rental club pay \$15 annual membership fee and \$2 for new release movies. Nonmembers pay \$3 for new release movies. Write a system of linear equations that represents this situation.

Question 2 – Solve the system of linear equations by substitution.

$$x - 5y = 1$$
$$-2x + 9y = -1$$

Question 3 – You have \$6 to spend on pens and notebooks. Pens cost \$0.75 each and notebooks cost \$1.50 each. Write and graph a linear inequality is two-variables that represents the number of pens and notebooks you can buy.