## Extra Credit Assignment for October

Directions - 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 $15 a+12 c$ 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.

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

## 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.

$$
\begin{gathered}
x-5 y=1 \\
-2 x+9 y=-1
\end{gathered}
$$

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.

