TOPIC TEN: WORD PROBLEMS

Instruction: For these problems, please show your work when necessary. They are an assortment of challenge questions, logic puzzles, and open response questions.

1. There were 6 pizza pies at the summer barbeque at Abby's House. She shares the pizza with her 7 friends. If all 8 people get the same amount of pizza, what portion of pizza can each person have? *Use pictures , diagrams, or math operations to show your work.*

2.   The class decides to make chocolate chip cookies for Mr. Burn's first day of school in September. Each student needs ¾ of a stick of butter for the recipe. If 14 students want to make cookies, how many sticks of butter do they need to buy? *Use pictures , diagrams, or math operations to show your work.*

3.   Steven's family recipe for macaroni and cheese makes 4 servings at 310 calories each. Steven decided to make 1½ times the original recipe. How many calories are in Steven's batch of macaroni and cheese?

4. Tabatha is dining out at Mandee's and decides to get an order of curly fries, chicken fingers, and a coca-cola. The total cost of the food with sales tax came to $18.64. If Tabatha decides to give the cashier a 20% gratuity (tip), what does her total bill come to?

5. Arlene has ⅓ as many goldfish as Isabelle. Isabelle has 5 times as many goldfish as Bruce. If Bruce has 18 goldfish, how many goldfish does Arlene have?

6. Meaghan started a baking service. During her first month in business, Meaghan spent $380 on supplies and drove 800 miles at an average cost of $0.30 per mile. In addition, her business phone and other expenses were $198. That month, Meaghan completed 60 jobs, earning $50 per job. What was Meaghan's **profit** during her first month in business? *Show all your work*

(profit is your expenses subtracted from the amount of money you earn)

7. Denny and Brendan decide to start a paper delivery business to make money over the summer. ***Use tables, graphs, or equations to help you solve.***

   a. Denny can deliver 6 papers every 15 minutes and Brendan can deliver 5 papers in that same amount of time. How many papers can they deliver in an hour?

   b. In Salem, 90 homes receive papers each day. When would Brendan and Denny need to wake up to deliver all their papers by 8am?