ALGEBRAIC EXPRESSIONS QUIZ REVIEW

1. **Write the following expressions using numbers, symbols and letters**

   a) Four times the difference of a number and 7

   b) The product of 12 and a number, decreased by three
   c) The sum of three times a number and 8
   d) The sum of seven and a number then multiplied by seven
   e) A number multiplied by seven then decreased by 7
   f) Twice the difference of a number and 9, and the result increased by 4
   g) The product of a number and the difference of the number and six
   h) The sum of half a number and 10

2. Write the following expressions using words:
   a) $4n \div 3$
   b) $3(p + 2)$
   c) $45/3n$
   d) $5 + 4(n + 6)$

3. **Write an algebraic expression for each situation to find the cost.**

   a) You make $10 an hour working at the CNE as a game host. _____ where ____
   represents_____

   b) The bus fare for each student is $5 plus a one-time fee of $50 _____

      where _____ represents_____

   c) It costs $2 per visit at the gym if you paid a $30 membership fee _____

      where _____ represents_____

4. **Evaluate the following statements if a = 2, b = 3, and c = 5. Show all your steps**
   a) $2a + 3c \div 5$ b) $3(c - a) + a$

   c) $3c + ab$ d) $5/c + ac + a^2$

5. Paul works at a hamburger stand. He earns $15 pay per day plus $2 for every combo he sells.
   a. Write an algebraic expression for how much money Paul earns in a day
   b. Use your expression to figure out how much money Paul will make if he sells 25 combos in a day?
   c. What if he only sells 5 combos?
6. Erin has a balance of $182.73 in her savings account. She makes a deposit of $12.50 in her account each week.
   a. Write an algebraic expression that represents the amount of money in Erin's savings account after *n* weeks.
   b. Calculate how much money Erin will have in her account after eight weeks.