Assignment 1

The school is selling 3x20-cm fruit sandwiches. The price is 5 for $0.60. The price of 1 sandwich is $0.20.

Problem 1: The school is giving away 3000 fruit sandwiches. How many sandwiches can be sold if the school needs to make $600 in profit? (4 points)

Multiple-Choice Questions: Select the correct answer.

1. The number of iterations in the following loop is
   \[ \text{for } i = 0 \text{ to } 9 \text{ step 2} \]
   \[ \text{print } i \]
   \[ \text{end} \]
   \[ \text{Answer: 5} \]

2. If the expression evaluated is \( x = 6 > 5 \), \( y = 3 \), \( z = 4 \), \( w = 5 \), what is the result of \((x+y)\times z\)?
   \[ \text{Answer: 30} \]

3. What is the value of \( x \) in the code below?
   \[ x = 3 \]
   \[ \text{if } x > 5 \]
   \[ \text{print } x \]
   \[ \text{else} \]
   \[ \text{print } x^2 \]
   \[ \text{end} \]
   \[ \text{Answer: 9} \]

4. The expression \( 5 \times (x+2) \) is equivalent to
   \[ \text{Answer: } (5x + 10) \]

5. What is the total of the table?
   \[ \begin{array}{c|c}
   \text{Row} & \text{Column} \\
   \hline
   1 & 2 \\
   3 & 4 \\
   \end{array} \]
   \[ \text{Answer: 10} \]

Multiple-Choice Questions: Select the correct answer.

1. A 30-year-old man has 3 children. How many children will he have 8 years from now?
   \[ \text{Answer: 3} \]

2. Write the function for the following code:
   \[ \text{Function } f \]
   \[ \text{Parameters: } x \]
   \[ \text{Body: } f(x) = x^2 + 1 \]
   \[ \text{Answer: } f(x) = x^2 + 1 \]

3. Write the output for the following code:
   \[ \text{Input: } x = 2 \]
   \[ \text{if } x > 0 \]
   \[ \text{print } x \]
   \[ \text{else} \]
   \[ \text{print } x^2 \]
   \[ \text{end} \]
   \[ \text{Answer: 2} \]

4. The expression \( x \times (y + z) \) is equivalent to
   \[ \text{Answer: } xy + yz \]