Name _____   **Math 7: Writing Expressions (Part 2)**

Questions 1 – 6:   Use any of the four operations (addition, subtraction, multiplication, and division) to write algebraic expressions that represent each of the following situations. Expressions should be written in simplest form.

1.   Christina, a chef, produces 80 meals per day on average.   _____
How many meals will she produce in n days?

2.   Lachlan bought m DVDs from Target for a total of $78.   _____
Write an expression for the average cost of each DVD.

3.   Beth earns $100 per week working at McDonalds.

    a.   How much she will earn in u weeks?   _____

    b.   How much will she earn in 7 weeks?   _____

4.   Luigi, a computer salesman, is paid a weekly wage of $390. He also earns a
commission (bonus) of $40 for each computer he sells.

    a.   How much will he earn if he sells n computers   _____
in one week?

    b.   How much will he earn if he sells 15 computers   _____
in one week?

5.   Venessa is with a cell phone provider that charges   _____
$0.32 per minute plus a connection fee of $0.25.
How much will she be charged for a call that lasts m minutes?

Questions 1 – 6:   Use any of the four operations (addition, subtraction, multiplication, and division) to write algebraic expressions that represent each of the following situations. Expressions should be written in simplest form.

ITEM	COST
Chips	$3.40
Cookies	$3.30
Biscuits	$1.90
M&Ms	$1.70
Cashews	$1.30

6. The table shows the cost of certain items in a vending machine. If Rachel buys x packets of biscuits and 2 packets of chips, how much will she have to pay in total?

_____

7.   At a bake sale, Kathleen sells a number of muffins (m) and a number of boxes of cookies (c).

a.   If she charges $2 for each muffin, and $5 for each   _____ , _____
box of cookies, select ALL the expressions below
that show how much money she can expect to make.

A) $5m + 2c$ B) $2m - 5c$

C) $5c + 2m$ D) $2m + 5c$

b.   If she charges $1.27 for each muffin, and $4.80 for   _____ , _____
each box of cookies, select ALL the expressions below
that show how much money she can expect to make.

A) $1.27m \times 4.80c$ B) $c \times 4.80 + m \times 1.27$

C) $1.27^2 + 4.80m$ D) $1.27m + 4.80c$

8.   Select ALL situations below that could explain the use of: _____ , _____

$$8a + 0.23$$

   A)   The cost of 0.23 pineapples at $\$a$ each, plus a bag that costs 8 dollars.

   B)   The cost of 8 pineapples at $\$a$ each, plus a bag that costs 0.23 dollars.

   C)   The cost of a pineapples at \$8 each, plus a bag that costs 0.23 dollars.

9.   An airline needs to calculate the amount of fuel   _____ , _____ , _____
   required for a flight, which depends on the total weight of the passengers
   and their luggage. The airline assumes each passenger weighs 170 pounds
   on average, and that each passenger has used the checked baggage
   allowance of 50 pounds and carry-on allowance of 25 pounds.

   If p represents the number of passengers boarding a flight,
   select ALL expressions below that could be used to calculate
   the total weight of passengers and their luggage.

   A) $p \times (170 + 50 + 25)$ B) $170 \times (p + 50 + 25)$

   C) $p \times (170 + 75)$ D) $p \times 245$

   E) $p \times 170 + p \times 50$

10.   Tom has to pay the price of his meal (b) plus a 10% tip.   _____ , _____

   Select ALL expressions that show the price he will pay for
   his meal including the tip.

   A) $b + 10b$ B) $b + 0.10b$

   C) $0.9b$ D) $1.1b$

11.   Lucy has a 20% discount coupon for a jacket which costs $\$x$.   _____ , _____

Select ALL expressions that show the discounted price she will pay for the jacket.

A) $0.8x$ B) $20x - x$

C) $x - 0.2x$ D) $x - 0.2$

12.   Tim has to pay the price of his meal (m) plus a 15% tip.   _____ , _____

Select ALL expressions that show the price he will pay for his meal including the tip.

A) $1.15m$ B) $m + 15m$

C) $m + 0.15m$ D) $0.85m$

13.   Lacy has a 25% discount coupon for jeans which costs $\$j$.   _____ , _____

Select ALL expressions that show the discounted price she will pay for the jacket.

A) $j - 0.25$ B) $j - 0.25j$

C) $25j - j$ D) $0.75j$