MATH6

Distance Learning 2020

Mrs. Doolan - Mr. Millard - Mr. Sangha

Menu Math

DAY 6 - Menu Math 3   Use **FIRST LETTERS** to represent each item.

Food:

Hamburger ………	$3.50
Cheeseburger …..	$4.00
Garden salad ……	$3.00

Drinks:

Soda……………	$1.00
Lemonade …….	$1.50
Milk ………….....	$1.75

Sides:

French Fries……..	$3.00
Potato chips …….	$0.50
Yogurt…………….	$2.25
Apple Slices……..	$0.75
Brownie ………….	$1.25

LOOK HERE FOR COMBO ORDERS # 1 - 4

Combo Meals:

          H   P   S
#1 Hamburger, P chips & Soda….. $4.50

          C   P   S
#2 Cheeseburger, P chips & Soda.. $5.00

          G   P   S
#3 G salad, P chips & Soda……….. $4.00

          M   L
★ milk or lemonade add $0.50

          F
★ substitute fries for an additional $2

Don't FORGET! You can use the Distributive property to simplify or re-write products of sums.

Consider Order 1:

> I would like 2 #1 combos , a #2 combo, and 2 #3 combos with milk.

Let's write an expression using parentheses and then find the expanded expression using the Distributive Property: *(no evaluating needed)*

ORDER: 2 #1's, 1 #2, 2 #3 w/milk

$2(H+P+S) + 1(C+P+S) + 2(G+P+M)$

$2H + 2P + 2S + C + P + S + 2G + 2P + 2M$

Invisible Combining Step

$2H + 2P + P + 2P + 2S + S + C + 2G + 2M$

$$\boxed{2H + 5P + 3S + C + 2G + 2M}$$

expanded terms - Combined!

Write an expression using parentheses, expand using the Distributive Property, and then simplify the expression to model each order.

Order 2:

I would like 3 #1 combos, 2 #2 combos, and a #3 combo.

$$3(H+P+S) + 2(C+P+S) + 1(G+P+S)$$

$$3H + 3P + 3S + 2C + 2P + 2S + G + P + S$$

$$\boxed{3H + 2C + G + 6P + 6S}$$

3 hamburgers, 2 cheeseburgers, 1 salad, 6 chips, 6 sodas

Order 3:

I would like 2 #1 combos, 2 #2 combos with fries, and a #2 combo with potato chips, and 3 #3 combos with lemonade.

$$2(H+P+S) + 2(C+F+S) + 1(C+P+S) + 3(G+P+L)$$

$$2H + 2P + 2S + 2C + 2F + 2S + C + P + S + 3G + 3P + 3L$$

$$\boxed{2H + 3C + 3G + 6P + 5S + 2F + 3L}$$

2 hamburgers, 3 cheeseburgers, 3 salads, 6 chips, 5 sodas 2 fries, and 3 lemonades

Order 4:

I would like a #1 combo with fries, 3 #2 combos with fries, a #2 combo with lemonade, 2 #3 combos with fries and 1 #3 combo with milk.

$$1(H+F+S) + 3(C+F+S) + 1(C+P+L) + 2(G+F+S) + 1(G+P+M)$$

$$H + F + S + 3C + 3F + 3S + C + P + L + 2G + 2F + 2S + G + P + M$$

$$\boxed{H + 4C + 3G + 2P + 6S + 6F + L + M}$$

1 hamburger, 4 cheeseburgers, 3 salads, 2 chips, 6 sodas, 6 fries, 1 lemonade, 1 milk

Assuming 1 food item, side, and drink (No GLUTTONY)

BONUS Questions - Do as many as you want!

B1: What would be the MOST EXPENSIVE meal you can make on the menu?

See Work

C, Y, M 8$

B2: What combo meal would SAVE YOU the most money? How much would you save?

See work   ALL Basic Combos save $0.50.

B3: Take orders from your family. Can you write the total order as a simplified expression and figure out the final cost?

Answers Vary.

(B1) The most expensive meal would be the most expensive items that can not make a Combo Meal.

Cheeseburger, Yogurt and milk

$C + Y + M$

$4 + 2.25 + 1.75$

$$
\begin{array}{r}
4.00 \\
2.25 \\
1.75 \\
\hline
8.00
\end{array}
$$

$8

(B2)

C#1

$H + P + S$

WILL SAVE YOU

C#2

$C + P + S$

THE MOST

C#3

$G + P + S$

Combo #2's

REAL PRICES

$C + P + S = \$5$

$3 + 0.50 + 1$

$= \$4.50$

$0.50 saved

$C + F + M = \$7.50$

$3 + 3 + 1.75$

$= \$7.75$

$0.25 saved

You actually save the most on All 3 Basic Combos **$0.50**

(B3) Let me know if you do Bonus 3. ☺