

PSSA and Keystone Exams
Summer 2023 Workshops

PSSA, Grade 7 Math

Bella's Gardening Materials

Handscoring Practice Set 1^{*}

^{*}Responses in this set do not have true scores. Apply scores based on scoring criteria.



73. Bella bought gardening materials from different stores.

At Garden Mart, Bella bought g packets of geranium seeds, m packets of marigold seeds, and z packets of zinnia seeds. All of the plant seeds were on sale for half price. The expression shown below represents the total cost of the plant seeds Bella bought.

$$\frac{1}{2}(2.48g + 1.74m + 1.96z)$$

- A. Write an expression without parentheses that also represents Bella's total cost at Garden Mart.

$$\frac{2.48g}{2} + \frac{1.74m}{2} + \frac{1.96z}{2}$$

At Plant World, Bella bought a hose and a shovel. The hose was priced at \$29.68, but Bella had a coupon for x dollars off. The price of the shovel was \$14.45.

- B. Write an expression to represent how much money, in dollars, Bella spent at Plant World.

Let m = money spent in dollars
at Plant World.

$$(29.68 - x) + 14.45 = m$$

F

73. *Continued.* Please refer to the previous page for task explanation.

Bella went to Yard Depot multiple times. Each time she was there, Bella bought a gardening hat and y pairs of gardening gloves. The expression shown below represents the total amount of money, in dollars, Bella spent at Yard Depot.

$$a(by + c)$$

C. Explain what a , b , and c each mean in terms of the situation.

In the expression, $a(by + c)$, " a " represents how many times she went to the store. " b " represents the number two since there is two gloves in a pair. Lastly, " c " represents the cost of the gardening hat.

F

73. Bella bought gardening materials from different stores.

At Garden Mart, Bella bought g packets of geranium seeds, m packets of marigold seeds, and z packets of zinnia seeds. All of the plant seeds were on sale for half price. The expression shown below represents the total cost of the plant seeds Bella bought.

$$\frac{1}{2}(2.48g + 1.74m + 1.96z)$$

- A. Write an expression without parentheses that also represents Bella's total cost at Garden Mart.

$$\frac{2.48g + 1.74m + 1.96z}{2}$$

At Plant World, Bella bought a hose and a shovel. The hose was priced at \$29.68, but Bella had a coupon for x dollars off. The price of the shovel was \$14.45.

- B. Write an expression to represent how much money, in dollars, Bella spent at Plant World.

$T = \text{Total}$

$$29.68 - x + 14.45 = T$$



73. **Continued.** Please refer to the previous page for task explanation.

Bella went to Yard Depot multiple times. Each time she was there, Bella bought a gardening hat and y pairs of gardening gloves. The expression shown below represents the total amount of money, in dollars, Bella spent at Yard Depot.

$$a(by + c)$$

C. Explain what a , b , and c each mean in terms of the situation.

A = amount of times she was there

B = price of gloves

C = gardening hat

F

73. Bella bought gardening materials from different stores.

At Garden Mart, Bella bought g packets of geranium seeds, m packets of marigold seeds, and z packets of zinnia seeds. All of the plant seeds were on sale for half price. The expression shown below represents the total cost of the plant seeds Bella bought.

$$\frac{1}{2}(2.48g + 1.74m + 1.96z)$$

- A. Write an expression without parentheses that also represents Bella's total cost at Garden Mart.

$$1.24g + .87m + .98z$$

At Plant World, Bella bought a hose and a shovel. The hose was priced at \$29.68, but Bella had a coupon for x dollars off. The price of the shovel was \$14.45.

- B. Write an expression to represent how much money, in dollars, Bella spent at Plant World.

$$14.45 + 29.68 - x$$

F

73. *Continued.* Please refer to the previous page for task explanation.

Bella went to Yard Depot multiple times. Each time she was there, Bella bought a gardening hat and y pairs of gardening gloves. The expression shown below represents the total amount of money, in dollars, Bella spent at Yard Depot.

$$a(by + c)$$

- C. Explain what a , b , and c each mean in terms of the situation.

a stands for the number of times Bella went to Yard Depot. b represents how much gardening gloves cost. c represents how much a gardening hat cost.

F

73. Bella bought gardening materials from different stores.

At Garden Mart, Bella bought g packets of geranium seeds, m packets of marigold seeds, and z packets of zinnia seeds. All of the plant seeds were on sale for half price. The expression shown below represents the total cost of the plant seeds Bella bought.

$$\frac{1}{2}(2.48g + 1.74m + 1.96z)$$

- A. Write an expression without parentheses that also represents Bella's total cost at Garden Mart.

The total cost is 198.98

At Plant World, Bella bought a hose and a shovel. The hose was priced at \$29.68, but Bella had a coupon for x dollars off. The price of the shovel was \$14.45.

- B. Write an expression to represent how much money, in dollars, Bella spent at Plant World.

$$\begin{array}{r} 29.68 \\ + 14.45 \\ \hline \end{array}$$

\$44.13

F

73. *Continued.* Please refer to the previous page for task explanation.

Bella went to Yard Depot multiple times. Each time she was there, Bella bought a gardening hat and y pairs of gardening gloves. The expression shown below represents the total amount of money, in dollars, Bella spent at Yard Depot.

$$a(by + c)$$

- C. Explain what a , b , and c each mean in terms of the situation.

A times the total number of hats
+ C

F

73. Bella bought gardening materials from different stores.

At Garden Mart, Bella bought g packets of geranium seeds, m packets of marigold seeds, and z packets of zinnia seeds. All of the plant seeds were on sale for half price. The expression shown below represents the total cost of the plant seeds Bella bought.

$$\frac{1}{2}(2.48g + 1.74m + 1.96z)$$

- A. Write an expression without parentheses that also represents Bella's total cost at Garden Mart.

$$\frac{1}{2} \times 2.48g + \frac{1}{2} \times 1.74m + \frac{1}{2} \times 1.96z$$

At Plant World, Bella bought a hose and a shovel. The hose was priced at \$29.68, but Bella had a coupon for x dollars off. The price of the shovel was \$14.45.

- B. Write an expression to represent how much money, in dollars, Bella spent at Plant World.

+ (total)

$$+ (\$29.68 + \$14.45 - x)$$

F

73. *Continued.* Please refer to the previous page for task explanation.

Bella went to Yard Depot multiple times. Each time she was there, Bella bought a gardening hat and y pairs of gardening gloves. The expression shown below represents the total amount of money, in dollars, Bella spent at Yard Depot.

$$a(by + c)$$

C. Explain what a , b , and c each mean in terms of the situation.

a represents the total amount of times that Bella went to Yard Depot.

b represents the cost of one pair of gardening gloves.

c represents the cost of the gardening hat.



73. Bella bought gardening materials from different stores.

At Garden Mart, Bella bought g packets of geranium seeds, m packets of marigold seeds, and z packets of zinnia seeds. All of the plant seeds were on sale for half price. The expression shown below represents the total cost of the plant seeds Bella bought.

$$\frac{1}{2}(2.48g + 1.74m + 1.96z)$$

- A. Write an expression without parentheses that also represents Bella's total cost at Garden Mart.

$$\frac{1}{2} 2.48g + 1.74 + 1.96z$$

At Plant World, Bella bought a hose and a shovel. The hose was priced at \$29.68, but Bella had a coupon for x dollars off. The price of the shovel was \$14.45.

- B. Write an expression to represent how much money, in dollars, Bella spent at Plant World.

$$\$29.68 - x + 14.45$$

F

73. *Continued.* Please refer to the previous page for task explanation.

Bella went to Yard Depot multiple times. Each time she was there, Bella bought a gardening hat and y pairs of gardening gloves. The expression shown below represents the total amount of money, in dollars, Bella spent at Yard Depot.

$$a(by + c)$$

C. Explain what a , b , and c each mean in terms of the situation.

- A is the Price of the hat
- B is the gardening gloves
- C is how much they were



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At Garden Mart, Bella bought g packets of geranium seeds, m packets of marigold seeds, and z packets of zinnia seeds. All of the plant seeds were on sale for half price. The expression shown below represents the total cost of the plant seeds Bella bought.

$$\frac{1}{2}(2.48g + 1.74m + 1.96z)$$

- A. Write an expression without parentheses that also represents Bella's total cost at Garden Mart.

$$\frac{2.48g}{2} + \frac{1.74m}{2} + \frac{1.96z}{2}$$

At Plant World, Bella bought a hose and a shovel. The hose was priced at \$29.68, but Bella had a coupon for x dollars off. The price of the shovel was \$14.45.

- B. Write an expression to represent how much money, in dollars, Bella spent at Plant World.

$$29.68 - x + 14.45$$

F

73. *Continued.* Please refer to the previous page for task explanation.

Bella went to Yard Depot multiple times. Each time she was there, Bella bought a gardening hat and y pairs of gardening gloves. The expression shown below represents the total amount of money, in dollars, Bella spent at Yard Depot.

$$a(by + c)$$

C. Explain what a , b , and c each mean in terms of the situation.

A is the number of times Bella visited Yard Depot.

B is the price of one pair of gardening gloves.

C is the price of one gardening hat.

✚

73. Bella bought gardening materials from different stores.

At Garden Mart, Bella bought g packets of geranium seeds, m packets of marigold seeds, and z packets of zinnia seeds. All of the plant seeds were on sale for half price. The expression shown below represents the total cost of the plant seeds Bella bought.

$$\frac{1}{2}(2.48g + 1.74m + 1.96z)$$

- A. Write an expression without parentheses that also represents Bella's total cost at Garden Mart.

$$1.24g + 0.87m + 0.98z$$

At Plant World, Bella bought a hose and a shovel. The hose was priced at \$29.68, but Bella had a coupon for x dollars off. The price of the shovel was \$14.45.

- B. Write an expression to represent how much money, in dollars, Bella spent at Plant World.

$$(\$29.68 - x) + \$14.45$$

F

73. *Continued.* Please refer to the previous page for task explanation.

Bella went to Yard Depot multiple times. Each time she was there, Bella bought a gardening hat and y pairs of gardening gloves. The expression shown below represents the total amount of money, in dollars, Bella spent at Yard Depot.

$$a(by + c)$$

C. Explain what a , b , and c each mean in terms of the situation.

b = 3 gloves

a = 1 trips

c = gardening hat

A is the amount of times she went to Yard Depot because whatever number you put there, it will multiply everything into the cost of everything depending on how many times she went there.

B is One pair of gardening gloves because when you put y to multiply by B , y represents the amount of pairs she got.

C is the gardening hat because it is a single purchase every time.

F

73. Bella bought gardening materials from different stores.

At Garden Mart, Bella bought g packets of geranium seeds, m packets of marigold seeds, and z packets of zinnia seeds. All of the plant seeds were on sale for half price. The expression shown below represents the total cost of the plant seeds Bella bought.

$$\frac{1}{2}(2.48g + 1.74m + 1.96z)$$

- A. Write an expression without parentheses that also represents Bella's total cost at Garden Mart.

$$\frac{2.48g + 1.74m + 1.96z}{2}$$

At Plant World, Bella bought a hose and a shovel. The hose was priced at \$29.68, but Bella had a coupon for x dollars off. The price of the shovel was \$14.45.

- B. Write an expression to represent how much money, in dollars, Bella spent at Plant World.

$$\underline{\$29.68} - x + \$14.45 = t \text{ (total)}$$

F

73. *Continued.* Please refer to the previous page for task explanation.

Bella went to Yard Depot multiple times. Each time she was there, Bella bought a gardening hat and y pairs of gardening gloves. The expression shown below represents the total amount of money, in dollars, Bella spent at Yard Depot.

$$a(by + c)$$

C. Explain what a , b , and c each mean in terms of the situation.

In the expression, a represents how many times she went to Yard Depot. It's being multiplied by b and c because every time she went she got the same thing, that cost the same amount of money. In the expression b means the price of the y amount of gardening gloves she bought each time she went there. The b is how much it costs per pair and she got multiple pairs each time, so that's why it's being multiplied by y . Also, in the expression c represents the gardening hat she bought each time she was there.

F

73. Bella bought gardening materials from different stores.

At Garden Mart, Bella bought g packets of geranium seeds, m packets of marigold seeds, and z packets of zinnia seeds. All of the plant seeds were on sale for half price. The expression shown below represents the total cost of the plant seeds Bella bought.

$$\frac{1}{2}(2.48g + 1.74m + 1.96z)$$

- A. Write an expression without parentheses that also represents Bella's total cost at Garden Mart.

$$\frac{1}{2}(1.74m + 1.96z + 2.48g)$$

At Plant World, Bella bought a hose and a shovel. The hose was priced at \$29.68, but Bella had a coupon for x dollars off. The price of the shovel was \$14.45.

- B. Write an expression to represent how much money, in dollars, Bella spent at Plant World.

$$(29.68 - x) + 14.45$$

F

73. *Continued.* Please refer to the previous page for task explanation.

Bella went to Yard Depot multiple times. Each time she was there, Bella bought a gardening hat and y pairs of gardening gloves. The expression shown below represents the total amount of money, in dollars, Bella spent at Yard Depot.

$$a(by + c)$$

C. Explain what a , b , and c each mean in terms of the situation.

To begin, a stands for the number of times Bella went to Yard Depot. This is because you have to multiply that based on how much she spent each time. b stands for the amount of money each pair of gardening gloves cost. To find the amount of money y pairs of gardening gloves cost, you must multiply y by the amount per pair. Lastly, c stands for the amount of money the gardening hat cost. You must add this onto the amount y pairs of gloves cost to get an accurate cost for all the materials.

PSSA Math: Bella's Gardening Materials (Grade 7); Practice Set 1

PRACTICE SET 1*

Subject: Math Item: Bella's Gardening Materials Grade: 7

Name _____

Number	Score	Consensus	Notes
P1-1			
P1-2			
P1-3			
P1-4			
P1-5			
P1-6			
P1-7			
P1-8			
P1-9			
P1-10			

* Responses in this set do not have true scores. Apply scores based on scoring criteria.