Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_

**Find the Best Price Portfolio Assignment**

**Math 7 B: Graphing in the COORDINATE PLANE UNIT**

**Directions:** You are shopping for two different grocery items that are available at two different stores. You want to do some comparison shopping and find the best price for each item.

You will analyze the prices by graphing them together on a coordinate grid and finding the unit price (the price for 1 item). Unit prices are sometimes very close, and the price difference may not be worth going to a different store to save a few pennies.

Find two grocery store weekly ad circulars that feature similar products. You can find the circulars online or in a printed newspaper.

Select two items in the ads that you would want to buy. Be sure that the same item, or something very similar, is offered at both stores. The grocery item can be just about anything the store offers (i.e. bakery items, fresh produce, dairy products, pre-packaged or frozen items, paper or cleaning products). Choose items that cost less than $5 per item so that your line won’t go off the grid.

**Price Comparison**

Complete the tables for each item to show the cost of 1, 2, 3, 4, 5, and 6 of the item at each store.

Plot the coordinate pairs (quantity, price) for each item on one coordinate grid. Draw a line through the points for each store. Label each line you graph with the store number or name.

Make your decision about where you will get the best price for the item and explain your reasoning.

Write an equation that shows the relationship between, the quantity *x* and the cost *y* of the item.

The second page of this document shows an example of how this should look for one item, but remember that you will be doing this for two items. The third and fourth pages are where you will do your work for the two items that you choose. Your work for the first item should be on page 3, and the work for the second item should be on page 4.

Helpful Hints: To plot the points on the grid, click “Insert” and then click “Shapes” and then choose the circle. To graph the line through the points, click “Insert” and then click “Shapes” and then choose the line. To label each line, insert a textbox and send it to the back so that it doesn’t cover the points or the line.

**Example**

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Item: Greek yogurt (individual cups)

Store 1: Walmart

Advertised Price: 4 for $3.60

|  |  |
| --- | --- |
| Quantity | Price |
| 1 | $0.90 |
| 2 | $1.80 |
| 3 | $2.70 |
| 4 | $3.60 |
| 5 | $4.50 |
| 6 | $5.40  Price in U.S. Dollars ($) |

Equation: *y* = 0.90*x*

Store 2: Target

Advertised Price: $0.75 each

|  |  |
| --- | --- |
| Quantity | Price |
| 1 | $0.75 |
| 2 | $1.50  Walmart |
| 3 | $2.25 |
| 4 | $3.00 |
| 5 | $3.75  Target |
| 6 | $4.50 |

Equation: *y* = 0.75*x*

Quantity

**Where I will purchase the item and why:** I will purchase the item from Target because I want to buy 6, and I will save $0.90 by buying at Target rather than Walmart.

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**First Item:**

**Store 1:**

**Advertised Price:**

|  |  |
| --- | --- |
| Quantity | Price |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |
| 6 | Price in U.S. Dollars ($) |

**Equation:**

**Store 2:**

**Advertised Price:**

|  |  |
| --- | --- |
| Quantity | Price |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |
| 6 |  |

**Equation:**

Quantity

**Where I will purchase the item and why:**

**Second Item:**

**Store 1:**

**Advertised Price:**

****

|  |  |
| --- | --- |
| Quantity | Price |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |
| 6 | Price in U.S. Dollars ($) |

**Equation:**

**Store 2:**

**Advertised Price:**

|  |  |
| --- | --- |
| Quantity | Price |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |
| 6 |  |

**Equation:**

Quantity

**Where I will purchase the item and why:**