



Unit Price





MATH ON THE JOB

Terry Robichaud is the department manager of the deli at Pete's Frootique grocery store in Halifax, Nova Scotia. Terry is Acadian. He grew up in Halifax, where he attended St. Patrick's High School.

"Some of my duties and responsibilities are to lead and motivate staff and provide vision and planning for business growth," he says. Terry also controls departmental finances such as wages and sales targets. "I use math to calculate prices for retail sales. From this I ensure our company achieves the appropriate profit margin on each item sold," says Terry.

Terry's background as a Red Seal chef helps him provide his customers with appealing, healthy food.

Terry is considering buying a new type of samosa to sell in the deli. He will buy them frozen from a wholesaler, to bake and sell in the deli. One wholesaler sells a box of 50 samosas for \$28.00. Another

wholesaler sells a box of 75 samosas for \$41.25. What is the unit price at each wholesaler? What is the unit price difference between the two companies? What factors apart from price might Terry want to consider?

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$$\frac{\$28.00}{50 \text{ samosas}} = \$0.56 / \text{samosa} \quad \bigg| \quad \frac{\$41.25}{75 \text{ samosas}} = \$0.55 / \text{samosa}$$

- quality
- cost
- taste
- free delivery / fast / frequency

SOLUTION

Calculate the unit price by dividing the total price from each wholesaler by the number of samosas.

Wholesaler A: $\$28.00/50 = \$0.56/\text{samosa}$

Wholesaler B: $\$41.25/75 = \$0.55/\text{samosa}$

Wholesaler B's unit price is \$0.01/samosa less than Wholesaler A's price.

Other factors to consider include the following:

- Has Terry bought from this wholesaler before and has he been happy with their products?
- Is the product in stock when he needs it?
- Does the wholesaler carry other products that he needs so that he can optimize his buying efficiency?

Unit Price

The cost of one unit; a rate expressed as a fraction in which the denominator is 1.

*** allows you to compare prices and determine the 'best buy'

EX: Five MVHS T-shirts cost \$40. The unit price is :

$$\frac{\$40.00}{5} = \$8.00/\text{t-shirt}$$



Unit Rate

The rate or cost for one item or unit.

EX: Lay's chips can produce 25 000 bags of chips in a regular 8 hour shift. The unit rate is:

$$\frac{25\,000}{8} = 3125 \text{ bags/hour}$$

Exampe #1:

Shoppers has a sale on Sunday where you can buy six 710 mL of pop for \$1.99. Calculate the unit price of 1 pop.



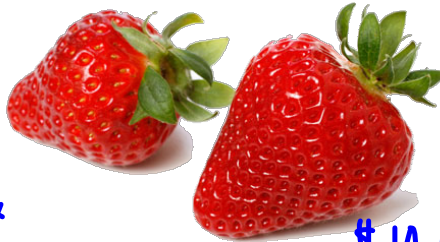
$$\frac{\$1.99}{6 \text{ pop}} = \$0.33 / \text{pop}$$

Example 2:



Shortcake picks fresh strawberries at a U-pick farm in Derby. If she fills a pint basket (0.5506 litres), it cost her \$1.50. If she fills a 4-litre ice cream pail, it will cost \$10.00.

Which size of container will give her a better buy?



$$\frac{\$1.50}{0.5506\text{L}} = \$2.72/\text{L}$$

$$\frac{\$10.00}{4\text{L}} = \$2.50/\text{L}$$



HOMEWORK...

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