

## ▶ Extending Concepts

**Product Downsizing** Instead of increasing the price of a product, some manufacturers decrease the amount of the product in a package but charge the same price. In Exercises 15–18, analyze the effect of product downsizing on unit price.

15. What is the difference in unit price?



Old size: 7 oz  
Price: \$0.89



New size: 5 oz  
Price: \$0.89

17. A manufacturer decreases the amount of product in a package but keeps the price the same. What effect does this have on the unit price of the product? Explain your reasoning.

16. What is the difference in unit price?



Old size: 64 fl oz  
Price: \$2.59



New size: 52 fl oz  
Price: \$2.59

18. Is it possible to increase the unit price of a product by decreasing both the size and the price? Explain your reasoning.

**Paying More for Less** The weight or volume listed on a product may be greater than the actual amount of the product that you are receiving. In Exercises 19 and 20, analyze how you could end up paying more money for less product.

19. A 1-pound package of chicken costs \$1.99.

- The label on the package says “up to 15% solution.” This means that 15% of the weight of the package is a solution. What is the actual unit price per pound of chicken?
- Compare the unit price in part (a) to the unit price on the package.

20. Two brands of bleach and their prices are shown.



Brand A  
96 fl oz  
\$1.79



Brand B  
182 fl oz  
\$2.12

- Find the unit prices of the two brands in dollars per gallon. Based on your calculations, which brand is the better buy?
- Brand A is 6% bleach. Brand B is 3% bleach. You can make 3% bleach by mixing 1 fluid ounce of brand A with 1 fluid ounce of water. How many fluid ounces of 3% bleach can you make using brand A?
- Find the unit prices of the two brands in dollars per gallon of 3% bleach. Based on your calculations, which brand is the better buy?

