

# Retail Management

Thirteenth Edition

## A Strategic Approach

### CHAPTER 17: Pricing in Retailing

#### Retail Mathematics Problems

Here are extra math problems on pricing. The answers appear at the end of this file.

1. A retailer can sell 75 printers per month at a price of \$200 each or 250 printers per month at a price of \$175 each. What is the elasticity of demand (expressed as a positive number)?

- a. 0.40
- b. 1.00
- c. 2.65
- d. 8.08

2. If the retailer in problem 1 can sell 200 printers at \$155, what is the price elasticity of demand (expressed as a positive number) between the prices of \$175 and \$155?

- a. 0.48
- b. 1.23
- c. 1.83
- d. 2.56

3. A men's specialty shop uses a markup of 45 percent at retail for branded shirts. What is the markup equivalent at cost?

- a. 55%
- b. 82%
- c. 102%
- d. 122%

4. A ladies' specialty shop buys merchandise for \$15 and sells it for \$25. What is the markup at retail?

- a. 20%
- b. 40%
- c. 100%
- d. 150%

5. A bookstore buys books for \$8 and sells them for \$10. What is the markup at retail?

- a. 20%
- b. 80%
- c. 140%
- d. 220%

6. A retailer purchases appliances for \$10 and desires a 40 percent markup at retail. What should the retail price be?

- a. \$11.70
- b. \$13.00
- c. \$16.67
- d. \$21.75

7. A retailer purchases milk for \$1.00 per half gallon and seeks a 30 percent markup at retail. What should the retail price be?

- a. \$1.08
- b. \$1.33
- c. \$1.65
- d. \$2.86

8. A belt shop requires a minimum markup of 40 percent at retail on leather belts. If the store owner feels that a line of leather belts should retail for \$25.00 each, what is the maximum price he or she will pay per belt?

- a. \$15.00
- b. \$17.00
- c. \$19.00
- d. \$21.42

9. The belt retailer noted in problem 8 sells plastic belts for \$10 and seeks a 25 percent markup at retail. What is the maximum price he or she will pay per belt?

- a. \$5.00
- b. \$7.50
- c. \$9.50
- d. \$11.00

10. A retailer has purchased a line of sports jackets for \$85 each. The selling price is \$125 per jacket. What is the markup at retail?

- a. 12.0%
- b. 32.0%
- c. 53.0%
- d. 63.0%

11. A retailer has purchased a line of suits for \$100 each. The selling price is \$175 per suit. What is the markup at retail?

- a. 2.9%
- b. 17.1%
- c. 42.9%
- d. 75.0%

12. A retailer has net annual sales of \$125,000. Retail expenses are \$75,000. Net profit is \$25,000. Compute the maintained markup at retail.

- a. 25%
- b. 33%
- c. 50%
- d. 80%

13. A retailer has net annual sales of \$2,000,000. Retail expenses are \$260,000. Net profit is \$400,000. Calculate the maintained markup at retail.

- a. 13.0%
- b. 16.5%
- c. 33.0%
- d. 50.0%

14. If the retailer in problem 13 does not plan for any retail reductions due very strong demand, what is the initial markup?

- a. 10.0%
- b. 13.0%
- c. 16.5%
- d. 33.0%

15. The retailer in problem 13 has planned retail reductions of \$100,000. What is the initial markup?

- a. 23.0%
- b. 33.0%
- c. 36.2%
- d. 43.4%

16. If the retailer in problem 13 has planned retail reductions of \$600,000, what is the initial markup?

- a. 26.2%
- b. 34.0%
- c. 48.5%
- d. 63.0%

17. A retailer buys merchandise for \$20.00 a piece. Half is sold for \$25.00 and half for \$35.00. What is the maintained markup?	a. 25.0%
	b. 30.0%
	c. 33.3%
	d. 42.8%

18. Reclining chairs are reduced from \$250 to \$140 each. Calculate the off-retail markdown percentage.	a. 20%
	b. 25%
	c. 33%
	d. 44%

19. A home furnishings retailer has additional markups totaling \$850 on a line of table lamps. Net sales of the lamps equal \$8,000. Compute the additional markup percentage.	a. 7.5%
	b. 10.6%
	c. 12.8%
	d. 16.1%

20. A home furnishings retailer plans to sell a lamp with a cost of \$100 at an original retail price of \$200. The firm expects to sell 200 lamps over the next year. How many units would the retailer have to sell if he reduces the price to \$175 and still earn the same profit?	a. 125
	b. 200
	c. 225
	d. 267

**ANSWERS:**

- |       |       |
|-------|-------|
| 1. d  | 13. c |
| 2. c  | 14. c |
| 3. b  | 15. c |
| 4. b  | 16. c |
| 5. a  | 17. c |
| 6. c  | 18. d |
| 7. d  | 19. b |
| 8. a  | 20. d |
| 9. b  |       |
| 10. b |       |
| 11. c |       |
| 12. d |       |