Math 1010: Practice Questions for Unit #3

To help you prepare for Test #3, complete these practice questions. These questions are similar to those you will see on the test. Complete them as you would on a test, that is, show your work.

1. Best Buy Entertainment can obtain Panasonic DVD players for $134 each less a trade discount of 35%. A comparable Samsung model is available for $127 less a trade discount of 30%. Which DVD player has the lower net cost? How much lower?

2. After a trade discount of 27.5%, a jeweller can obtain 0.50 carat Empress Cut, F Colour Canadian Polar Bear diamonds for $2,138.75. What is the dollar value of the trade discount?

3. Green Thumb Nursery sells junipers to the gardening departments of local grocery stores and building supply stores. The net price per tree is $27.06 after a trade discount of $22.14. What rate of trade discount is the nursery giving to retailers?

4. A 36% discount on custom draperies at Window World is equivalent to savings of $450. What are the net and list prices of the custom order?

5. Silvia received an Invoice in the amount of $5,445 dated March 23 with terms 3/10, 1 ½ /20, n/60. What payment of April 13 will settle the invoice?

6. The terms of payment on an invoice for $2,835.49 are 2/15, n/45. The balance owed after a payment within the discount period is $1,135.49. What was the amount of the payment?

7. Conestoga Contractors has 2 invoices from PaveAll: one dated March 23 for $234.75 and one dated April 5 for $840. PaveAll's terms are 2/10, 1/20, n/30. How much should Conestoga Contractors send in to pay off both invoices on April 10?

8. Mayfair distributors sent Bed 'n Bath an invoice dated December 23 for $5,344.90 with terms 2/10, 1/20, n/30. What is the balance on the account after a payment of $3,000 on January 3? What additional payment on January 11 will settle the invoice?

9. An invoice for $2,956.60 dated February 2 has terms 2/15, 1/30, n/90. What three equal payments made on February 17, March 2 and May 2 will settle the invoice?

10. Given a cost of $41.50, a selling price of $63 and overhead expenses that are 20% of selling price, what is the:
    a. Operating profit
    b. Rate of markup on cost
    c. Rate of markup on selling price

11. Twelfth Street Service buys batteries at a cost of $84 each. Operating expenses are 25% of cost and the owner requires a profit of 10% of cost. What is the selling price of each battery?

12. Island Business bought two types of electronic calculators for resale. The Number Cruncher costs $42 and sells for $56.50. The Math Boss costs $78 and sells for $95. Business overhead expenses are 24% of cost. For each model, determine the rate of markup on selling price, the dollar amount of the overhead expenses and the dollar amount of the profit.

13. What is the selling price of an item costing $72 if the markup is:
    a. 40% of cost?
    b. 40% of selling price?

14. What is the cost of an item that sells for $65 if the markup is:
    a. 30% of cost?
    b. 30% of selling price?

15. The Beaver Ski Shoppe sells ski vests for $98. The rate of markup on cost is 75%.
    a. What did Beaver Ski Shoppe pay for each vest?
    b. What is the rate of markup on selling price?

16. The rate of markup on cost on a flat screen monitor that sells for $780 is 75%. What is the monitor's cost to the retailer and the rate of markup on selling price?

17. Digital Devices sets retail prices on computers, monitors and printers to generate a 30% rate of markup on selling price. Overhead expenses normally work out to be 30% of cost. What is the operating profit on a monitor that costs $345?

18. The sign on a rack of sport coats reads: "All prices already marked down 30%." What is the regular price of a coat that sells for $196.49?

19. Poles Apart obtains Nitro TI snowboards at a cost of $345 and marks them up by 35% of the selling price. For its Annual Spring Sale, Poles Apart marks down prices by 25%. What is the reduced selling price for the Nitro TI snowboards?

20. Get-Away Vacations sells sightseeing tours for the Ottawa Valley for $3,849 per person. Overhead expenses for the company are 31% of the selling price and the target profit is 17% of the selling price. What is the cost of the tour to Get-Away Vacations? What is the lowest price they can offer and still cover all costs and expenses? What is the highest rate of markdown at which the company will still break even?

21. A bedroom suite costs Town & Country Furniture $5,000 less 30% and 15%. The normal rate of markup on cost is 90%. The suite is marked down 30% in a Mid-Summer Sale. What is the reduced selling price for the suite?

22. A lawn mower retails for $349. The dealer's overhead is 25% of cost and normal operating profit is 16 2/3% of cost. What is the largest amount of markdown that will allow the dealer to breakeven? What rate of markdown will price the lawn mower at cost?

23. Central Ski and Cycle purchased 50 pairs of ski boots for $360 per pair less 33 1/3% and 10%. The regular rate of markup on selling price of the boots is 40%. The store's overhead is 22% of the selling price. During a January Clearance Sale, the price was reduced to $270 per pair. What was the rate of markdown for the sale? What was the profit or loss on each pair of boots at the reduced price? At the reduced price, what was the rate of markup on cost?