

## Exam 4 Review – Condensed

- Exam Question Overview
  - o Chapter 1 (1 question)
    - Financial vs. managerial accounting
  - o Chapter 2 (3 questions)
    - Cost behavior, high-low method, contribution margin vs. gross margin
  - o Chapter 3 (3 questions)
    - Breakeven point & target operating income
      - Units and \$
    - 1 conceptual question (most likely on how different changes effect breakeven point)
  - o Chapter 4 (1 question)
    - Applying overhead
  - o Chapter 7 (1 question)
    - Activity Based Costing
  - o Chapter 8 (5 questions)
    - 1 question for each decision (each gone over separately in review)
  - o Chapter 5 (4 questions)
    - Cash collections/ disbursements, Accounts Receivable/ Payable, cash-budget financing, and production
  - o Chapter 6 (3 questions)
    - Flexible budget variance, price/rate variance, quantity variance
  - o Chapter 9 (7 questions)
    - NPV, IRR, payback period, ARR, 2 conceptual
  - o Chapter 10 (7 questions)
    - Conceptually know decentralization, ROI (also drawbacks), RI, transfer pricing
- Chapter 1 (1 question)
  - o Financial vs. Managerial Accounting
    - Users: Internal vs External
    - Rules: None vs GAAP
    - Reporting Unit: Organizational Units vs Whole organization
    - Time Horizon: Past results + projected future vs past results
    - Timing: As needed vs end of accounting period
- Chapter 2 (3 questions, 1 conceptual)
  - o Cost Behavior
    - Variable costs
      - Any total cost that varies in proportion to a business activity
      - 10% increase in volume results in 10% increase in total variable cost
    - Fixed costs
      - Does not change with activity level
      - Discretionary Fixed Costs- fixed costs that can be changed over the short run
      - Committed fixed costs- cannot be changed over the short run

- Fixed in total, but changes on a per unit basis (becomes cheaper as more units are used)
  - Like spreading the cost out over more units

#### Step costs

- Fixed over only a small range of activity
- Total cost remains constant over step range but unit cost decreases as usage within step range increases

#### Mixed costs

- Composed of both a fixed and variable cost component

#### o High-Low Method

- 1. Identify highest and lowest levels of activity (based on activity)
- 2. Compute variable cost per unit (slope of the line)
  - $\text{change in cost} / \text{change in activity} = \text{variable cost}$
- 3. Calculate fixed cost by either high or low point
  - $\text{Fixed costs} = \text{total costs} - \text{variable costs}$
- 4. Complete cost equation:  $(\text{variable cost per unit} \times \text{units}) + \text{fixed costs} = \text{total costs}$

#### o Contribution Margin vs. Gross Margin

- GAAP Format
  - Sales
  - - COGS
  - = Gross Profit
  - - Selling and Administrative expense
  - = Operating Income
- Contribution Margin Format
  - Sales Revenue
  - - Variable Expenses
  - = contribution margin
  - - Fixed Expenses
  - = Operating Income

#### • Chapter 3 (3 questions, 1 conceptual)

##### o Breakeven Point and Target Operating Income

#### Breakeven analysis\*

- Set Operating Income to 0
- $\text{Sales} - \text{VC} - \text{FC} = \text{Operating Income}$ 
  - $\text{Sale price (x)} - \text{vc per unit (x)} - \text{FC} = \text{operating income}$
- Breakeven point in units =  $\text{total fixed expenses} / \text{contribution margin per unit}$
- Breakeven point in dollars =  $\text{total fixed expenses} / \text{contribution margin ratio}$ 
  - $\text{Contribution margin ratio} = 1 - (\text{VC}/\text{sales})$
- Know what happens to breakeven point when variable costs, etc. increase/decrease

#### Target operating income\*

- Set profit equation to target operating income and solve for variables
- $\text{Units required to meet target OI} = \text{Total FC} + \text{Target OI} / \text{CM per unit}$

- What you have to earn in total / CM per unit
    - Dollars required to meet target OI = total FC + Target OI / CM ratio
      - What you have to earn in total /CM ratio
  - o Conceptual Question (other possible topics)
    - Operating leverage
      - Operating leverage = contribution margin / net operating income
      - Higher operating leverage is riskier but can contribute to higher gains
      - Higher fixed costs = higher operating leverage
    - Pricing
      - Cost-plus pricing
        - Adds an amount to the cost of the product or service to cover the company's operating costs and contribute to its profit
        - Cost + Markup = sales price
        - What it costs you + what you want to make in profit = what you sell it for
      - Target costing
        - Starts with price consumers are willing to pay
        - Find out price consumers are willing to pay - % profit you want to make = amount you must be able to produce the product for
- Chapter 4 (1 question)
  - o Applying Overhead
    - o Predetermined overhead rate=
 
$$\frac{\text{Budgeted total manufacturing overhead cost}}{\text{Budgeted total level of application base}}$$
    - o Applied overhead= predetermined overhead rate \* actual amount of application base
    - o Disposing of under- or over-applied overhead
    - o Underapplied overhead- recorded less overhead than what incurred
      - Results in a debit balance in manufacturing overhead control account
      - Inventory cost too low; needs to be increased
    - o Overapplied overhead- recorded more overhead than what incurred
      - Inventory cost too high; needs to be decreased
    - o Small amount make adjustments to cost of goods sold
      - Underapplied= debit to COGS (increased)
      - Overapplied=credit to COGS (decreased)
    - o Prorating Overapplied and Underapplied overhead
      - Add balances of WIP inventory, finished goods inventory, and COGS
      - Calculated percentage each represented of total
      - Multiply percentage by under or overapplied amount
- Chapter 7 (1 question)
  - o Activity Based Costing
    - o Costing technique that assigns costs to cost objects such as products or customers, based on the activities those cost objects require
    - o Like applying overhead, but instead of having one cost driver for all activities, you have a different and more relevant cost driver for each activity
    - o Activity is an event that consumes resources