1. Aspen company produces widgets. August budgeted production costs are below:  
    Widgets to be produced 100,000  
    Direct material (variable) $30,000  
    Direct labor (variable) 50,000  
    Supplies (variable) 25,000  
    Supervision (fixed) 40,000  
    Depreciation (fixed) 30,000  
    Other (fixed) 10,000  
    Total   $185,000

In September, Aspen expects to produce 120,000 widgets. Assuming no structural changes, what is Aspen ’s budgeted production cost per widget for September?

**2)** Use cost information in 2) above. In August, the actual direct labor costs were $46,000 and Aspen produced and sold 90,000 widgets. The direct labor performance variance (difference) is?

**3)** Below is a performance report that compares budgeted and actual profit of Boyles Beer for the month of April:

Budget Actual Difference

Sales $200,000 $202,000 $2,000

Less:

Cost of ingredients: 162,000 166,000 4,000

Salaries: 31,000 31,200 200

Controllable profit: $47,000 $44,800 ($2,200)

In evaluating the department in terms of its increases in sales and expenses, what will be most important to investigate?

**4)** Cara's Pizza produced and sold 1,000 pizzas last month and had total variable ingredients that cost $4,345.

If production and sales are expected to increase by 15% next month, which of the following statements is true?

A) Total variable materials costs are expected to be $4,779.50

B) Variable material cost per unit is expected to be $4.99

C) Total variable materials costs are expected to be $4,345

D) Total variable materials costs are expected to be $4,996.75

**5)** Capital Grill has budgeted the following costs for a month in which 2,500 Colby Steak dinners will be produced and sold: Materials, $5,580; hourly labor, $5,400; rent, $1,300; depreciation, $500; and other fixed costs, $1,000. Each Colby Steak dinner sells for $22.00 each.

What is the budgeted total variable cost?

**6)** The New Product, Inc is looking to achieve a net income of 15 percent of sales. Here is the firms' profile: Unit sales price is $10; Variable cost per unit is $ 6; Total fixed costs are $ 50,000. What is the level of sales (in units) required to achieve a net income of 15 percent of sales?

**7)** One Small Grill Company is a start up firm with the following profile: Unit selling price = $ 230; Variable cost per unit = $ 130; Fixed costs = $ 36,000; and Tax rate = 40%. What number of units should the firm sell to achieve an after tax target income of $ 6,000?

**8)** JingleGym, a best-selling toy, has a selling price of $15. If the contribution margin ratio is 40% and if the fixed costs are $60,000, how many JingleGyms must the company sell for a profit of $450,000?

**9)** JingleGymApp, a new division of JingleGym will be responsible for creating and selling an app version of the very successful JingleGym. The company expects that the new division will be housed in a separate floor and will pay a rent of $20,000 to JinglyGym. Salaries for the developers and a manager will total $400,000. New computers will cost $300,000 and will be depreciated annually at the rate of 10% of cost. Advertising expenses are expected to be $50,000. The cost of producing an app is negligible at 4% of the selling price but Apple's appstore charges a 30% commission for each app sold. With this data, JingleGym wants you to estimate the contribution margin (CM) and the break-even point (BEP) in dollars for the new division.

**10)** Cook’s Company sells two models of its product. The King sells for $140 and has variable costs of $100. The Queen sells for $80 and has variable costs of $60. Richter typically sells 3 Queen for every King sold. Fixed costs are $250,000. How many Queens will be sold at the break-even point?