

ACT 5140 Accounting for Decision Makers - Homework 5

Question 1

The XYZ Corporation sells only one product. The following is budgeted information for the product:

Annual Production and Sales Capacity (Units)	60,000	
Budgeted Selling Price	\$ 280	Per Unit
Variable Cost of Goods Sold	\$ 90	Per Unit
Fixed Manufacturing Cost	\$ 750,000	
Variable Selling and Administrative Costs	\$ 36	Per Unit
Fixed Selling and Administrative Costs	\$ 625,000	

The company's Corporate Tax Rate is 36%

1. How many units does the company need to sell to breakeven? (Round your answer up to the nearest whole unit)

2. How much revenue does the company need to generate to breakeven?

3. How many units does the company need to sell to earn an operating profit (before taxes) of \$600,000 ?

4. How much revenue does the company need to generate to earn net income (after taxes) of \$900,000 ?
(Take your answer to dollars and cents)

5. Assume the company is currently producing and selling 60,000 Units
 By what percentage will operating income change if sales increase by 6% from the 60,000 Units?
 Be sure to provide figures to justify your answer
Round your percentage answer out 2 more decimal places (i.e. xx.xx%)

6. Assume the company is currently producing and selling 60,000 Units
 By what percentage will operating income change if sales decrease by 4% from the 60,000 Units?
 Be sure to provide figures to justify your answer
Round your percentage answer out 2 more decimal places (i.e. xx.xx%)

Question 2

A production company is planning to sell tickets to a show for the price of \$ 210.00 each

Budget for the variable costs per ticket are \$ 90.00 per attendee

while its total fixed costs have a budget of \$ 80,000

Safety issues with the theater limits capacity to 750 people

What should the production company do and give reasons for your answer

Be specific in your response

Question 3

The following is budgeted information for the XYZ Corporation

	Product 1	Product 2
Annual Production and Sales Units	4,000	1,000
Projected Selling Price	\$50.00	\$120.00
Direct Production Cost Information		
Materials (per unit)	\$9.00	\$16.00
Direct Labor (per unit)	\$15.00	\$25.00

Independent Variable X

Variable

Variable

Variable

Rules for rounding:

- 1 Round monetary numbers to dollars and cents
- 2 Round % calculations to 4 decimal places (i.e. xx.xx%)
- 3 Round units up to nearest whole unit

Additional Information:

Selling and administrative costs (a mixed cost) are budgeted to be \$75,000.00 at the production and sales listed above
 The variable component cost (for both products) / unit = \$4.00 Given (Multiply this x units = total variable cost)

Manufacturing overhead cost (a mixed cost) are budgeted to be \$91,000.00 at the production and sales listed above
 The fixed component = \$61,000.00 Given (Therefore the difference must be total variable cost)

Each product uses the same amount of variable manufacturing overhead per unit.

Assuming the budgeted sales mix remains intact, how many units of each product does XYZ need to sell in order to break even?

Preliminary Goals:
 Preliminary Goal 1: Find total Fixed Costs and Variable Costs/Unit
 Preliminary Goal 2: Find contribution margin per unit to determine break even units