Required:

a) Can Johnson achieve its desired profit?
b) Suppose that Johnson follows a strategy of one of its competitors which is to spend $75,000 on advertising so that there is more brand awareness. This would permit them to raise the selling price to $3.50 but their sales volume would decrease to 225,000 units. Will Johnson achieve its desired profit?

(12 pts) 5. Alscott Company is developing its budgets for 2011 and, for the first time, will use the kaizen approach. The initial 2011 income statement, based on static data from 2010 is as follows:

Sales (140,000 units)	$420,000
Less: Cost of goods sold	280,000
Gross margin	140,000
Operating expenses (includes $28,000 of depreciation)	112,000
Operating income	$28,000

Selling prices for 2011 are expected to increase by 8%, and sales volume in units will decrease by 10%. The cost of goods sold as estimated by the kaizen approach will decline by 10% per unit. Other than depreciation, all other operating costs are expected to decline by 5%.

Required:

Prepare a kaizen-based budgeted income statement for 2011.

(10 pts) 6. Deep Blue manufactures floatation vests in Charleston, South Carolina. Deep Blue's contribution margin income statement for the most recent month contains the following data:

Sales in units	31,000
Sales in revenue	$434,000
Variable expenses:	
Manufacturing	$186,000
Marketing and administrative	110,000
Total variable expenses	296,000
Contribution margin	138,000
Fixed expenses:	
Manufacturing	130,000
Marketing and administrative	92,000
Total fixed expenses	222,000
Operating income (loss)	$(84,000)

Suppose Boats-n- More wishes to buy 4,600 vests from Deep Blue. Acceptance of the order will not increase Deep Blue's variable marketing and administrative expenses. The Deep Blue plant has enough unused capacity to manufacture the additional vests. Boats-n-More has offered $8 per vest, which is below the normal sale price of $14.
Required:

a) Determine whether Deep Blue should accept this special sales order.
b) Identify long-term factors Deep Blue should consider in deciding whether to accept the special sales order.

(10 pts) 7. 8 The Draper Company is considering dropping its Doombug toy due to continuing losses. Revenue and cost data on the toy for the past year follow:

Sales of 15,000 units	$150,000
Variable costs	120,000
Contribution margin	30,000
Fixed costs	40,000
Net loss	(10,000)

If the toy were discontinued, then Draper could avoid $8,000 per year in fixed costs.

Required:

a) Under the given conditions, by how much would the operating income change if the Doombug toy is discontinued?
b) Suppose that if the Doombug toy is dropped, the production and sale of other Draper toys would increase so as to generate a $16,000 increase in the contribution margin received from these other toys. If all other conditions are the same, by how much would the operating income change?

(15 pts) 8. Selected information concerning the operations of Kern Company follows:

Units in beginning inventory	-0-
Units produced	10,000
Units sold	9,000

The selling price per unit is $30.

Direct materials	$40,000
Direct labor	20,000
Variable factory overhead	12,000
Fixed factory overhead	25,000
Variable selling and administrative expenses	4,500
Fixed selling and administrative expenses	30,000

Required:

a) Determine the product unit cost using i) absorption costing ii) variable costing and iii) throughput costing.
b) Prepare an income statement using variable costing.

(20 pts) 9. Avanti manufactures embroidered jackets. The company prepares flexible budgets and uses a standard cost system to control manufacturing costs. The following standard unit cost of a jacket is based on the static budget volume of 14,000 jackets per month.

Direct materials (3.0 sq. ft x \$4.00 per sq. ft.)		\$12.00
Direct labor (2 hours x \$9.40 per hour)		18.80
Manufacturing overhead:		
Variable (2 hours x @\$0.65 per hour)	\$1.30	
Fixed (2 hours x \$2.20 per hour)	4.40	5.70
Total cost per jacket		\$36.50

Data for November of the current year include the following:

a. Actual production was 13,600 jackets.
b. Actual direct materials usage was 2.70 square feet per jacket at an actual cost of \$4.15 per square foot.
c. The amount of actual direct materials purchased was 40,000 square feet.
d. Actual direct labor usage of 24,480 hours cost \$235,008.
e. Total actual overhead cost was \$79,000; \$20,000 was variable.

Requirements:

a) Compute the eight variances discussed in class.
b) Avanti's management intentionally purchased superior materials for November production. How did this decision affect the other cost variances? Overall was the decision wise? Explain.

(10 pts) 10. Smithtone Company uses 8,000 units of a certain part in production each year. Presently, this part is purchased from an outside supplier at $12 per unit. For some time now there has been idle capacity in the factory that could be utilized to make this part. The following information has been assembled on the unit costs of making this part internally:

Direct materials	$3.25
Direct labor	2.75
Variable manufacturing overhead	2.00
Fixed manufacturing overhead	5.00

The fixed manufacturing overhead listed above represents an allocation of existing costs to this part. However, there would be an increase of $12,000 in fixed manufacturing overhead costs for the salary of a new supervisor.

Required:

If Smithtone chooses to make the part instead of buying it outside, the change in the company's operating income per year would be how much? Show computations.