This information is common for questions 1 and 2:

Acorn Products sells small boats for $360. It has costs currently assigned to it of $280. A competitor is bringing a new small boat to market that will sell for $300. Acorn's management believes it must lower the price to $300 to compete in the market for small boats. Marketing forecasts that the new price will cause sales to increase by 10 percent, even with the new competitor in the market. Acorn's sales are currently 100,000 boats per year.

1. What is the target cost if the company wants to maintain the same income level, and Marketing is correct?

   a. $225.00
   b. $227.27
   c. $246.67
   d. $280.00
   e. $401.20

2. What is the change in operating income if Marketing is correct and only the sales price is changed?

   a. $ 2,200,000
   b. $ 600,000
   c. $(2,200,000)
   d. $(5,800,000)
   e. $(5,999,000)

3 Omark Corporation currently manufactures a subassembly for its main product. The costs per unit are as follows:

Direct materials	$ 2
Direct labour	20
Variable overhead	10
Fixed overhead	16
Total	$48

Reliance Corp. has contacted Omark with an offer to sell them 5,000 of the subassemblies for $44 each. Omark will eliminate $50,000 of fixed overhead if it accepts the proposal.

Should Omark make or buy the subassemblies? What is the difference between the two alternatives?

a. buy; savings = $20,000
b. buy; savings = $50,000
c. make; savings = $60,000
d. make; savings = $10,000
e. none of the above

4 Bush Corp. manufactures two models of pens, a standard and a deluxe model. Three activities have been identified as cost drivers, and the related overhead costs ($60,000) have been pooled together to provide the following information:

Product	Number of Setups	Number of Components	Number of DLH
Standard	22	8	375
Deluxe	28	12	225
Costs per pool	$15,000	$36,000	$9,000

What is the total amount of overhead costs assigned to the deluxe model, assuming activity-based costing is used?

a. $36,225
b. $33,375
c. $37,500
d. $22,500
e. $26,625

5 Pershing Company budgeted the following costs for the production of its one and only product, razor blades, for the next fiscal year:

Direct materials	$187,500
Direct labour	130,000
Factory overhead:	
Variable	140,000
Fixed	107,500
Selling and administrative:	
Variable	60,000
Fixed	80,000
Total costs	$705,000

Pershing has a target profit of $150,000.

The target rate of return for setting prices as a percentage of prime costs would be

a. 54 percent.
b. 87 percent.
c. 96 percent.
d. 122 percent.
e. 169 percent.

Bernie Company used regression analysis to predict the annual cost of indirect materials. The results were as follows:

Indirect Materials Cost Explained by Units Produced	
Constant	\$4,378
Standard error of Y estimate	\$ 912
R^2	0.9183
No. of observations	12
Degrees of freedom	10
X coefficient(s)	2.35
Standard error of coefficient(s)	0.437525

The coefficient of determination is

a. 0.437525.
b. 12.
c. 2.35.
d. 0.9183.
e. none of the above

7 Brandorf Company has two sources of funds — long term debt with a market and book value of \$9 million issued at an interest rate of 10 percent, and equity capital that has a market value of \$6 million (book value of \$2 million). Brandorf Company has profit centres in the following locations with the following data. The cost of equity capital is 15 percent, while the tax rate is 30 percent.

	Operating Income	Total Assets	Current Liabilities
Ottawa	\$ 480,000	\$2,000,000	\$100,000
St. Johns	\$ 600,000	\$4,000,000	\$300,000
Regina	\$1,020,000	\$6,000,000	\$600,000

What is EVA for St. Johns?

a. \$ 142,200
b. \$ 42,600
c. \$ 163,200
d. \$ 200,000
e. \$ 145,000

8. Satellite, Inc., is in the process of evaluating its new products. One new signal receiver, has two production runs each year. Setup costs are $20,000 per setup. The new receiver incurred $60,000 in development costs and is expected to be produced for three years. Direct costs of producing the receivers are $80,000 per run of 5,000 receivers. Indirect manufacturing costs charged to each run are $90,000. Destination charges for each receiver average $2, and customer service expenses average $0.40. The receivers are going to sell for $50 the first year, and the price will increase by $6 each year thereafter. Sales units equal production units each year.

What is the operating income for the first year?

a. $ 36,000
b. $ 40,000
c. $ 96,000
d. $ 238,000
e. $ 444,500

9. Nicholas, Critelli and Associates is in the process of evaluating its new client services for the business consulting division. Estate planning, a new service, incurred $600,000 in development costs and employee training. The direct cost of providing this service, which is all labour, averages $100 per hour. Other costs for this service are estimated at $2,000,000 per year. The current program for estate planning is expected to last for two years, at which time a new law will be in place that will require new operating guidelines for tax consulting. Customer service expenses average $400 per client, with each job lasting an average of 400 hours. The current staff expects to bill 40,000 hours for each of the two years the program is in effect. Billing averages $140 per hour.

What is the life-cycle operating income?

a. $(1,480,000)
b. $(1,400,000)
c. $ 3,200,000
d. $ 11,200,000
e. $ 17,600,000

10 The differential approach is often considered superior to the total project approach to capital budgeting

a. because it is easier to select the components for the model.
b. because it uses net cash flows instead of gross cash flows.
c. for all large investment decisions.
d. because it is faster when analyzing fewer than three alternatives.
e. because it can more easily accommodate multiple investment opportunities.