| Assuit University |  | Year: 4 |
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| Faculty of Commerce | Guiding Questions | July 2020 |
| Department of Accounting | Seventeen pages | Managerial Accounting |

Choose the right answer $\mathrm{A}, \mathrm{B}, \mathrm{C}$ or D

1) Sunk costs $\qquad$ .
A) are future costs for decision making
B) are avoidable costs
C) are irrelevant for decision making
D) are foregone contribution by not using a limited resource in its next-best alternative use
Answer: C
2) A relevant revenue is revenue that is $a(n)$ $\qquad$ .
A) past revenue and differs among alternative courses of action
B) future revenue and differs among alternative courses of action
C) in-hand revenue
D) earned revenue

Answer: B
3) A relevant cost is a cost that is a $\qquad$ .
A) future cost
B) past cost
C) sunk cost
D) non-cash expense

Answer: A
4) When deciding to accept a one-time-only special order from a wholesaler, management should $\qquad$ _.
A) consider the sunk costs and opportunity costs
B) not consider the special order's impact on future prices of their products
C) determine whether excess capacity is available
D) verify past design costs for the product

Answer: C
5) When there is an excess capacity, it makes sense to accept a one-time-only special order for less than the current selling price if $\qquad$ .
A) incremental revenues exceed incremental costs
B) additional fixed costs is incurred to accommodate the order
C) the company placing the order is in the same market segment as your current customers
D) incremental revenue equals incremental operating income

Answer: A
6) Dantley's Furniture manufactures rustic furniture. The cost accounting system estimates manufacturing costs to be $\$ 190$ per table, consisting of $80 \%$ variable costs and $20 \%$ fixed costs. The company has surplus capacity available. It is Back Forrest's policy to add a $45 \%$ markup to full costs. Dantley's Furniture is invited to bid on a one-time-only special order to supply 180 rustic tables. What is the lowest price Dantley's Furniture should bid on this special order?
A) $\$ 22,230$

B) $\$ 27,360$
C) $\$ 34,200$
D) $\$ 42,750$

Answer: B
Explanation: $\$ 190 \times 80 \% \times 180$ tables $=\$ 27,360$
7) Zephram Corporation has a plant capacity of 200,000 units per month. Unit costs at capacity are:
Direct materials $\$ 6.00$
Direct labor 5.00
Variable overhead 4.00
Fixed overhead 2.00
Marketing—fixed 6.00
Marketing/distribution—variable 4.60
Current monthly sales are 190,000 units at $\$ 30$ each. Q, Inc., has contacted Zephram Corporation about purchasing 2,500 units at $\$ 24$ each. Current sales would not be affected by the one-time-only special order. What is Zephram's change in operating profits if the one-time-only special order is accepted?
A) $\$ 11,000$ increase
B) $\$ 31,500$ increase
C) $\$ 22,500$ increase
D) $\$ 49,000$ increase

Answer: A
Explanation: $(\$ 6.00+\$ 5.00+\$ 4.00+\$ 4.60)=\$ 19.60$
$(\$ 24.00-\$ 19.60) \times 2,500=\$ 11,000$ increase
8) Crandle Manufacturers Inc. is approached by a potential customer to fulfill a one-time-only special order for a product similar to one offered to domestic customers. The company has excess capacity. The following per unit data apply for sales to regular customers:

| Variable costs: |  |
| :--- | ---: |
| $\quad$ Direct materials | $\$ 130$ |
| Direct labor | 110 |
| Manufacturing support | 125 |
| Marketing costs | 65 |
| Fixed costs: |  |
| Manufacturing support | 175 |
| Marketing costs | $\underline{85}$ |
| Total costs | $\underline{690}$ |
| Markup $(50 \%)$ | $\underline{\mathbf{3 4 5}}$ |
| Targeted selling price |  |

What is the full cost of the product per unit?
A) $\$ 430$
B) $\$ 1,035$
C) $\$ 690$
D) $\$ 345$

Answer: C
Explanation: Full cost $=\$ 130+\$ 110+\$ 125+\$ 65+\$ 175+\$ 85=\$ 690$

9) Crandle Manufacturers Inc. is approached by a potential new customer to fulfill a one-time-only special order for a product similar to one offered to domestic customers. The company has excess capacity. The following per unit data apply for sales to regular customers:

Variable costs:
Direct materials $\$ 170$
Direct labor 90
Manufacturing support 135
Marketing costs 85
Fixed costs:
Manufacturing support 145
Marketing costs $\quad \underline{55}$
Total costs 700
Markup (40\%) $\underline{280}$
Targeted selling price $\underline{\underline{\$ 980}}$
What is the contribution margin per unit?
A) $\$ 220$
B) $\$ 280$
C) $\$ 500$
D) $\$ 700$

Answer: C
Explanation: Contribution margin per unit $=\$ 980-(\$ 170+\$ 90+\$ 135+\$ 85)=$ $\$ 500$
10) McMurphy Corporation produces a part that is used in the manufacture of one of its products. The costs associated with the production of 12,000 units of this part are as follows:

| Direct materials | $\$ 86,000$ |
| :--- | ---: |
| Direct labor | 126,000 |
| Variable factory overhead | 58,000 |
| Fixed factory overhead | $\underline{138,000}$ |
| $\quad$ Total costs | $\underline{\$ 408,000}$ |

Of the fixed factory overhead costs, $\$ 55,000$ is avoidable. Toners Company has offered to sell 12,000 units of the same part to McMurphy Corporation for $\$ 41$ per unit.

Assuming there is no other use for the facilities, Schmidt should $\qquad$ _.
A) make the part, as this would save $\$ 16$ per unit
B) buy the part, as this would save $\$ 16$ per unit
C) buy the part, as this would save the company $\$ 192,000$
D) make the part, as this would save $\$ 14$ per unit

Answer: D
Explanation: Avoidable costs total $=\$ 86,000+\$ 126,000+\$ 58,000+\$ 55,000=$ \$325,000.
$\$ 41-(\$ 325,000 / 12,000)=\$ 14$

11) Striker 44 Corporation produces a part that is used in the manufacture of one of its products. The costs associated with the production of 12,000 units of this part are as follows:

| Direct materials | $\$ 86,000$ |
| :--- | ---: |
| Direct labor | 130,000 |
| Variable factory overhead | 57,000 |
| Fixed factory overhead | $\underline{135,000}$ |
| $\quad$ Total costs | $\underline{\$ 408,000}$ |

Of the fixed factory overhead costs, $\$ 58,000$ is avoidable.
Assuming no other use of their facilities, the highest price that McMurphy should be willing to pay for 12,000 units of the part is $\qquad$ _ .
A) $\$ 408,000$
B) $\$ 273,000$
C) $\$ 331,000$
D) $\$ 351,000$

Answer: C
Explanation: $\$ 86,000+\$ 130,000+\$ 57,000+\$ 58,000=\$ 331,000$
12) Relevant data in a make-or-buy decision of a part include which of the following?
A) The portion of fixed costs that would be incurred whether the product is made or purchased
B) Some portion of fixed costs that would be saved if the product is outsourced
C) Annual plant insurance costs
D) Management consultant fees to restructure the organization framework of the company and improve overall strategic planning
Answer: B
13) In a make-or-buy decision, which of the following would not be relevant?
A) the quality of the product
B) the portion of fixed costs that could be eliminated by outsourcing
C) a lease that could be discontinued upon accepting the "buy proposal"
D) property taxes on the plant that will still be necessary even if the product is outsourced
Answer: D
14) Which of the following is a relevant cost to be included in a make-or-buy decision?
A) fixed salaries that will not be incurred if the part is outsourced
B) pension costs to the current employees
C) increase in the cost of repairing of all equipment of the firm
D) material-handling costs that cannot be eliminated even if the product is outsourced Answer: A
15) Which of the following minimizes the risks of outsourcing (buy from outside)?
A) the use of short-term contracts that specify price
B) shifting the firm's responsibility for on-time delivery to the supplier
C) building close partnerships with the supplier

D) increasing the contract price

Answer: C
16) The cost to produce Part A was $\$ 20$ per unit in 2013 and in 2014 it has increased to $\$ 22$ per unit. In 2014, Supplier ABC has offered to supply Part A for $\$ 18$ per unit.
For the make-or-buy decision $\qquad$ .
A) incremental revenues are $\$ 4$ per unit
B) incremental costs are $\$ 2$ per unit
C) net relevant costs are $\$ 2$ per unit
D) differential costs are $\$ 4$ per unit

Answer: D
17) W.T. Ginsburg Engine Company manufactures part ACT31107 used in several of its engine models. Monthly production costs for 1,010 units are as follows:

| Direct materials | $\$ 41,000$ |
| :--- | ---: |
| Direct labor | 7,500 |
| Variable overhead costs | 34,500 |
| Fixed overhead costs | $\underline{18,000}$ |
| Total costs | $\underline{\$ 101,000}$ |

It is estimated that $7 \%$ of the fixed overhead costs assigned to ACT31107 will no longer be incurred if the company purchases ACT31107 from the outside supplier. W.T. Ginsburg Engine Company has the option of purchasing the part from an outside supplier at $\$ 94.75$ per unit.

The maximum price that W.T. Ginsburg Engine Company should be willing to pay the outside supplier is ---
A) $\$ 82$ per ACT31107 part
B) $\$ 83.43$ per ACT31107 part
C) $\$ 100$ per ACT31107 part
D) $\$ 101.25$ per ACT31107 part

Answer: B
Explanation: Avoidable costs $=\$ 84,260 / 1,010$ units $=\$ 83.43$ per part
18) A study by a consultant shows that a company that had $\$ 2,000,000$ of inventory was holding excess inventory of $\$ 320,000$ that could be eliminated with a few process improvements. It also has $\$ 620,000$ in marketable securities that yield $5 \%$ per year. What is the estimated annual opportunity cost of holding the excess inventory?
A) $\$ 16,000$
B) $\$ 100,000$
C) $\$ 31,000$
D) $\$ 47,000$

Answer: A (Explanation: $\$ 320,000 \times 5 \%=\$ 16,000$ )
19) Rubium Micro Devices currently manufactures a subassembly for its main product. The costs per unit are as follows:

| Direct materials | $\$ 54$ |
| :--- | ---: |
| Direct labor | 35 |
| Variable overhead | 40 |
| Fixed overhead | $\underline{34}$ |
| $\quad$ Total | $\underline{\$ 163}$ |

Crayola Technologies Inc. has contacted Rubium with an offer to sell 6,000 of the subassemblies for $\$ 144$ each. Rubium will eliminate $\$ 89,000$ of fixed overhead if it accepts the proposal. Should Rubium make or buy the subassemblies? What is the difference between the two alternatives?
A) Buy; savings $=\$ 89,000$
B) Buy; savings $=\$ 7,000$
C) Make; savings $=\$ 1,000$
D) Make; savings $=\$ 203,000$

Answer: C
Explanation: Cost to buy: $6,000 \times \$ 144.00=\$ 864,000$
Cost to make: $[(\$ 54.00+\$ 35.00+\$ 40.00) \times 6,000+\$ 89,000]=\$ 863,000$
Cost savings $=\$ 864,000-\$ 863,000=\$ 1,000 ;$ make the subassemblies
20) Altec Services Corporation has relevant costs of $\$ 46$ per unit to manufacture 1,050 units of Part A. A current supplier offers to make Part A for $\$ 33$ per unit. Alternatively, the company can rent out the capacity for $\$ 30,000$. If capacity is constrained, the opportunity cost of buying Part A from the supplier is $\qquad$ _.
A) $\$ 0$
B) $\$ 13,650$
C) $\$ 43,650$
D) $\$ 30,000$

Answer: D (rent)
21) Springer Products manufactures three different product lines, Model X, Model Y, and Model Z. Considerable market demand exists for all models. The following per unit data apply:

|  | Model $\mathbf{X}$ | Model $\mathbf{Y}$ |  | Model Z |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | $\$ 50$ | $\$ 66$ |  | $\$ 80$ |  |
| Selling price | 10 | 10 |  | 10 |  |
| Direct materials | 15 | 15 | 30 |  |  |
| Direct labor $(\$ 15$ per hour) | 12 | 12 |  | 10 | 10 |
| Variable support costs $(\$ 5$ per machine-hour) | 5 |  |  |  |  |
| Fixed support costs | 12 |  |  |  |  |

Which model has the greatest contribution margin per unit?
A) Model X
B) Model Y
C) Model Z
D) Both Model X and Model Y have the highest and same contribution margin per unit
Answer: B
Explanation: Model X $\quad \$ 50-\$ 10-\$ 15-\$ 5=\$ 20$
Model Y $\quad \$ 66-\$ 10-\$ 15-\$ 10=\$ 31$ highest
Model Z $\quad \$ 80-\$ 10-\$ 30-\$ 10=\$ 30$
22) Springer Products manufactures three different product lines, Model X, Model Y, and Model Z. Considerable market demand exists for all models. The following per unit data apply:


|  | Model X | Model Y | Model |
| :---: | :---: | :---: | :---: |
| Selling price | \$52 | \$60 | \$74 |
| Direct materials | 8 | 8 | 8 |
| Direct labor (\$16 per hour) | 16 | 16 | 32 |
| Variable support costs (\$5 p | e-hour) | 5 | 10 |
| Fixed support costs | 12 | 12 | 12 |

If there is excess capacity, which model is the most profitable to produce?
A) Model X
B) Model Y
C) Model Z
D) Both Model X and Model Y have same and highest profitability

Answer: B
Explanation: Model Y, since it has the greatest contribution margin per unit
Model X $\quad \$ 52-\$ 8-\$ 16-\$ 5=\$ 23$
Model Y $\quad \$ 60-\$ 8-\$ 16-\$ 10=\$ 26$ highest
Model Z $\quad \$ 74-\$ 8-\$ 32-\$ 10=\$ 24$
23) Springer Products manufactures three different product lines, Model X, Model Y, and Model Z. Considerable market demand exists for all models. The following per unit data apply:

|  | Model X | Model Y | Model Z |  |
| :--- | :---: | :---: | :---: | :---: |
|  | $\$ 55$ | $\$ 69$ | $\$ 78$ |  |
| Selling price | 10 |  | 10 | 10 |
| Direct materials | 15 | 15 | 30 |  |
| Direct labor (\$15 per hour) | 11 | 11 | 11 |  |
| Variable support costs (\$7 per machine-hour) | 7 | 14 | 14 |  |
| Fixed support costs | 11 |  | 11 |  |

If there is a machine breakdown, which model is the most profitable to produce?
A) Model X
B) Model Y
C) Model Z
D) Both Model X and Model Y have same and highest profitability

Answer: A
Explanation: Model X since it has the greatest contribution margin per machine-hour
Model X $\quad \$ 55-\$ 10-\$ 15-\$ 7=\$ 23 / 1=\$ 23$ highest
Model Y $\quad \$ 69-\$ 10-\$ 15-\$ 14=\$ 30 / 2=\$ 15$
Model Z $\quad \$ 78-\$ 10-\$ 30-\$ 14=\$ 24 / 2=\$ 12$
24) Kinnane's Fine Furniture manufactures two models, Standard and Premium. Weekly demand is estimated to be 106 units of the Standard Model and 74 units of the Premium Model. The following per unit data apply:

## Standard Premium

Contribution margin per unit \$21 \$24
Number of machine-hours required
3
6
If there are 495 machine-hours available per week, how many rockers of each model should Kinnane produce to maximize profits?
A) 106 units of Standard and 29 units of Premium
B) 17 units of Standard and 74 units of Premium
C) 106 units of Standard and 74 units of Premium
D) 83 units of Standard and 41 units of Premium


Answer: A
Explanation: Standard (106 units $\times 3 \mathrm{mh})+$ Premium ( 29 units $\times 6 \mathrm{mh}$ ) $=495$ machine-hours of the constrained resource
25) Colonial North Manufacturing, Inc. is considering eliminating one of its product lines. The fixed costs currently allocated to the product line will be allocated to other product lines upon discontinuance. What financial effects occur if the product line is discontinued?
A) net income will decrease by the amount of the contribution margin of the product line being discontinued
B) the company's total fixed costs will increase by the amount of the contribution margin of the product line being discontinued
C) the company's total fixed costs will decrease by the amount of the product line's fixed costs
D) net income will decrease by the amount of the product line's fixed costs

Answer: A
26) Discontinuing unprofitable products will $\qquad$ .
A) increase profitability if the resources no longer required by the discontinued product can be eliminated
B) increase profitability if capacity constraints are adjusted
C) decrease profitability if the fixed costs does not change after discontinuing the particular business segment
D) increase profitability when a large portion of the fixed costs are unavoidable

Answer: A
27) A segment has the following data:

| Sales | $\$ 650,000$ |
| :--- | ---: |
| Variable costs | 386,000 |
| Fixed costs | 365,500 |

What will be the incremental effect on net income if this segment is eliminated, assuming the fixed costs will be allocated to profitable segments?
A) $\$ 284,500$ increase
B) $\$ 386,000$ decrease
C) $\$ 264,000$ decrease
D) $\$ 365,500$ decrease

Answer: C
Explanation: Change in net income $=\$ 650,000-\$ 386,000=\$ 264,000$ decrease
28) State Road Fabricators Inc. is considering eliminating Model A02777 because of losses over the past quarter. The past three months of information for Model A02777 are summarized below:

Sales (1,100 units)
\$470,000
Manufacturing costs:
Direct materials $\quad 160,000$
Direct labor (\$15 per hour) $\quad 80,000$
Overhead
150,000
Operating loss $\quad(\$ 80,000)$


Overhead costs are $75 \%$ variable and the remaining $25 \%$ is depreciation of special equipment for model A02777 that has no resale value.

If Model A02777 is dropped from the product line, operating income will $\qquad$ _.
A) increase by $\$ 80,000$
B) decrease by $\$ 117,500$
C) increase by $\$ 37,500$
D) decrease by $\$ 80,000$

Answer: B
Explanation: $\$ 470,000-\$ 160,000-\$ 80,000-\$ 112,500=\$ 117,500$ This product contributes $\$ 117,500$ toward corporate profits, therefore, discontinuing this product will decrease operating income by $\$ 117,500$.
29) The management accountant for Giada's Book Store has prepared the following income statement for the most current year:

Cookbook Travel Book Classics Total

| Sales | \$63,000 | \$179,000 | \$60,000 | \$302,000 |
| :---: | :---: | :---: | :---: | :---: |
| Cost of goods sold | 37,000 | 70,000 | 23,000 | $\underline{130,000}$ |
| Contribution margin | 26,000 | 109,000 | 37,000 | 172,000 |
| Order and delivery proce | sing 19,000 | 26,000 | 9,000 | 54,000 |
| Rent (per sq. foot used) | 3,000 | 3,000 | 3,000 | 9,000 |
| Allocated corporate cost | 10,000 | 10,000 | 10,000 | 30,000 |
| Corporate profit | \$(6,000) | \$70,000 | \$15,000 | \$79,000 |

If the cookbook product line had been discontinued prior to this year, the company would have reported $\qquad$ _.
A) greater corporate profits
B) the same amount of corporate profits
C) less corporate profits
D) resulting profits cannot be determined

Answer: C
Explanation: $\$ 63,000-\$ 37,000-\$ 19,000-\$ 3,000=\$ 4,000$
The cookbook product line contributed $\$ 4,000$ toward corporate profits. Without the cookbooks, corporate profits would be $\$ 4,000$ less than currently reported.
30) The management accountant for Giada's Book Store has prepared the following income statement for the most current year:

|  | Cookbook | Travel Book |  | Classics |  |
| :--- | :---: | :---: | :---: | :---: | ---: |
| Sales | $\$ 65,000$ |  | $\$ 164,000$ |  | $\$ 55,000$ |

If the travel book line had been discontinued, corporate profits for the current year would have decreased by $\qquad$ .
A) $\$ 97,000$
B) $\$ 72,000$
C) $\$ 68,000$
D) $\$ 58,000$

Answer: C
Explanation: $\$ 164,000-\$ 67,000-\$ 25,000-\$ 4,000=\$ 68,000$
31) Hartley's Meat Pies is considering replacing its existing delivery van with a new one. The new van can offer considerable savings in operating costs. Information about the existing van and the new van follow:

|  | Existing van |  | New van |
| :--- | ---: | ---: | ---: |
|  | $\$ 50,000$ |  | $\$ 93,000$ |
| Original cost | $\$ 17,500$ | $\$ 11,000$ |  |
| Annual operating cost | $\$ 32,000$ | - |  |
| Accumulated depreciation | 10 years | 10 years |  |
| Current salvage value of the existing van $\$ 23,500$ | $\$ 0$ | $\$ 0$ |  |
| Remaining life | $\$ 0$ | $\$ 1,800$ | $\$ 9,300$ |

Relevant costs for this decision include $\qquad$ .
A) the original cost of the existing van
B) accumulated depreciation
C) the annual operating cost
D) the book value of the existing van

Answer: C
32) Hartley's Meat Pies is considering replacing its existing delivery van with a new one. The new van can offer considerable savings in operating costs. Information about the existing van and the new van follow:

|  | Existing van |  | New van |
| :--- | ---: | ---: | ---: |
| Original cost | $\$ 56,000$ |  | $\$ 95,000$ |
| Annual operating cost | $\$ 22,500$ |  | $\$ 15,000$ |
| Accumulated depreciation | $\$ 33,000$ |  | - |
| Current salvage value of the existing van $\$ 27,500$ |  | - |  |
| Remaining life | 10 years |  | 10 years |
| Salvage value in 10 years | $\$ 0$ |  | $\$ 0$ |
| Annual depreciation | $\$ 2,300$ |  | $\$ 9,500$ |

If Hartley's Meat Pies replaces the existing delivery van with the new one, over the next 10 years operating income will $\qquad$ -.
A) decrease by $\$ 95,000$
B) increase by $\$ 75,000$
C) decrease by $\$ 75,000$
D) increase by $\$ 95,000$

Answer: B
Explanation: New van $(\$ 15,000 \times 10$ years $)$ - Existing van $(\$ 22,500 \times 10$ years $)=$ $\$ 75,000$ less in operating costs, which results in a $\$ 75,000$ increase in operating income.
33) Planet Design Services, Inc., is considering replacing a machine. The following data are available:


|  | Replacement |  |
| :--- | ---: | ---: |
| Old Machine | Machine |  |
| Original cost | 12 | $\$ 510,000$ |
| Useful life in years | 6 | 6 |
| Current age in years | $\$ 350,000$ | 0 |
| Book value | 0 | - |
| Disposal value now | $\$ 122,000$ | - |
| Disposal value in 6 years | 0 | 0 |
| Annual cash operating costs | $\$ 102,000$ | $\$ 59,000$ |

Which of the data provided in the table is a sunk cost?
A) the annual cash operating costs of the old machine
B) the annual cash operating costs of the replacement machine
C) the disposal value of the old machine
D) the original cost of the old machine

Answer: D
34) Planet Design Services, Inc., is considering replacing a machine. The following data are available:

## Replacement

## Old Machine Machine

| Original cost | $\$ 640,000$ | $\$ 520,000$ |
| :--- | ---: | ---: |
| Useful life in years | 12 | 6 |
| Current age in years | 6 | 0 |
| Book value | $\$ 400,000$ | - |
| Disposal value now | $\$ 162,000$ | - |
| Disposal value in 6 years | 0 | 0 |
| Annual cash operating costs | $\$ 107,000$ | $\$ 61,000$ |

For the decision to keep the old machine, the relevant costs of keeping the old machine is $\qquad$ _.
A) $\$ 492,000$
B) $\$ 642,000$
C) $\$ 804,000$
D) $\$ 107,000$

Answer: B
Explanation: Relevant cost $=\$ 107,000 \times 6=\$ 642,000$
35) Planet Design Services, Inc., is considering replacing a machine. The following data are available:

|  | Replacement <br> Old Machine |  |
| :--- | ---: | ---: |
| Machine |  |  |
| Original cost | $\$ 650,000$ | $\$ 510,000$ |
| Useful life in years | 10 | 5 |
| Current age in years | 5 | 0 |
| Book value | $\$ 400,000$ | - |
| Disposal value now | $\$ 142,000$ | - |
| Disposal value in 5 years | 0 | 0 |
| Annual cash operating costs | $\$ 100,000$ | $\$ 66,000$ |

The difference between keeping the old machine and replacing the old machine is
$\qquad$
-.
A) $\$ 910,000$ in favor of keeping the old machine
B) $\$ 198,000$ in favor of keeping the old machine
C) $\$ 910,000$ in favor of replacing the old machine
D) $\$ 198,000$ in favor of replacing the old machine

Answer: B
Explanation: New [\$510,000 + $(5 \times \$ 66,000)-\$ 142,000]$ - Old $[(5 \times \$ 100,000)]=$ \$198,000
36) Golden Generator Supply is approached by Mr. Stephen, a new customer, to fulfill a large one-time-only special order for a product similar to one offered to regular customers. Golden Generator Supply has excess capacity. The following per unit data apply for sales to regular customers:

| Direct materials | $\$ 1800.00$ |
| :--- | ---: |
| Direct manufacturing labor | 130.00 |
| Variable manufacturing support | 210.00 |
| Fixed manufacturing support | $\underline{150.00}$ |
| $\quad$ Total manufacturing costs | 2290.00 |
| Markup (20\% of total manufacturing costs) $\underline{458.00}$ |  |
| Estimated selling price | $\underline{\$ 2748.00}$ |

For Golden Generator Supply, what is the minimum acceptable price of this one-timeonly special order?
A) $\$ 1930.00$
B) $\$ 2140.00$
C) $\$ 2290.00$
D) $\$ 2748.00$

Answer: B
Explanation: Price for special order $=\$ 1800+\$ 130+\$ 210=\$ 2140.00$.
37) Golden Generator Supply is approached by Mr. Stephen, a new customer, to fulfill a large one-time-only special order for a product similar to one offered to regular customers. Golden Generator Supply has excess capacity. The following per unit data apply for sales to regular customers:

| Direct materials | $\$ 1900.00$ |
| :--- | ---: |
| Direct manufacturing labor | 120.00 |
| Variable manufacturing support | 210.00 |
| Fixed manufacturing support | $\underline{170.00}$ |
| $\quad$ Total manufacturing costs | 2400.00 |
| Markup (25\% of total manufacturing costs) $\underline{\underline{600.00}}$ |  |
| Estimated selling price | $\underline{\underline{03000.00}}$ |

If Golden Generator Supply accepts the order at $\$ 2640$, what is the amount contributed towards fixed costs and profit on a sales order of 1600 units?
A) $\$ 384,000$
B) $\$ 656,000$
C) $\$ 1,232,000$
D) $\$ 992,000$

Answer: B
Explanation: Contribution per unit $=\$ 410(\$ 2640-\$ 2230)$. Total contribution $=$ $\$ 656,000(\$ 410 \times 1600)$.

38) Relevant costs for target pricing are $\qquad$ .
A) variable manufacturing costs
B) variable manufacturing and variable nonmanufacturing costs
C) all fixed costs
D) all future costs, both variable and fixed

Answer: D
39) Place the following steps for the implementation of target costing in order:

A = Derive a target cost
$B=$ Develop a target price
$\mathrm{C}=$ Perform value engineering
$\mathrm{D}=$ Determine target operating income
A) B D A C
B) B A D C
C) A D B C
D) A B C D

Answer: B
40) After conducting a market research study, Magnificent Manufacturing decided to produce a new interior door to complement its exterior door line. It is estimated that the new interior door can be sold at a target price of $\$ 260$. The annual target sales volume for interior doors is 20,000. Magnificent has target operating income of $40 \%$ of sales.

What is the target cost for each interior door?
A) $\$ 364$
B) $\$ 260$
C) $\$ 156$
D) $\$ 104$

Answer: C
Explanation: Estimated sales revenue $=\$ 260 \times 20,000$ units $=\$ 5,200,000$.
Target operating income $=\$ 5,200,000 \times 40 \%=\$ 2,080,000$.
Target cost $=\$ 5,200,000-\$ 2,080,000=\$ 3,120,000$.
Target cost per unit $=\$ 3,120,000 / 20,000$ units $=\$ 156$.
41) Sales of Granite City Products Inc. have been on a steady decline for the last 12 months. A market research study conducted revealed that the product of Granite City Products Inc. can be sold only for $\$ 440$ as opposed to the current market price charged of $\$ 540$ per unit. Granite City Products Inc. has decided to revise its sales price to $\$ 440$. The annual sales target volume of the product after price revision is 260 units. Granite City Products Inc. wants to earn $30 \%$ on its sales amount.

What are the target sales revenues?
A) $\$ 148,720$
B) $\$ 114,400$
C) $\$ 80,080$
D) $\$ 42,120$

Answer: B
Explanation: The target sales revenues is $\$ 114,400(\$ 440 \times 260)$.

42) Sales of Granite City Products Inc. have been on a steady decline for the last 12 months. A market research study conducted revealed that the product of Granite City Products Inc. can be sold only for $\$ 420$ as opposed to the current market price charged of $\$ 520$ per unit. Granite City Products Inc. has decided to revise its sales price to $\$ 420$. The annual sales target volume of the product after price revision is 280 units. Granite City Products Inc. wants to earn $30 \%$ on its sales amount.

What is the target operating income?
A) $\$ 82,320$
B) $\$ 35,280$
C) $\$ 117,600$
D) $\$ 152,880$

Answer: B
Explanation: The target sales revenues is $\$ 117,600(\$ 420 \times 280)$.
The target operating income is $\$ 35,280(\$ 117,600 \times 30 \%)$.
43) Sales of Granite City Products Inc. have been on a steady decline for the last 12 months. A market research study conducted revealed that the product of Granite City Products Inc. can be sold only for $\$ 500$ as opposed to the current market price charged of $\$ 600$ per unit. Granite City Products Inc. has decided to revise its sales price to $\$ 500$. The annual sales target volume of the product after price revision is 200 units. Granite City Products Inc. wants to earn $40 \%$ on its sales amount.

What is the total target cost?
A) $\$ 140,000$
B) $\$ 60,000$
C) $\$ 100,000$
D) $\$ 40,000$

Answer: B
Explanation: The target sales revenues is $\$ 100,000(\$ 500 \times 200)$.
The target operating income is $\$ 40,000(\$ 100,000 \times 40 \%)$.
The target cost is $\$ 60,000(\$ 100,000-\$ 40,000)$.
44) Sales of Granite City Products Inc. have been on a steady decline for the last 12 months. A market research study conducted revealed that the product of Granite City Products Inc. can be sold only for $\$ 480$ as opposed to the current market price charged of $\$ 580$ per unit. Granite City Products Inc. has decided to revise its sales price to $\$ 480$. The annual sales target volume of the product after price revision is 280 units. Granite City Products Inc. wants to earn $30 \%$ on its sales amount.

What is the target cost per unit?
A) $\$ 625.00$
B) $\$ 336.00$
C) $\$ 480.00$
D) $\$ 145.00$

Answer: B
Explanation: The target sales revenues is $\$ 134,400(\$ 480 \times 280)$.
The target operating income is $\$ 40,320(\$ 134,400 \times 30 \%)$.
The target cost is $\$ 94,080(\$ 134,400-\$ 40,320)$.
The target cost per unit is $\$ 94,080 / 280=\$ 336.00$
45) Which of the following is true of a budget?
A) Budgets are used to express only the operational plans and not the strategic plans of a company.
B) Budgets do not account for nonfinancial aspects of the upcoming period.
C) Budgets are most useful when they are planned independent of the company's strategic plans.
D) Budgets help managers to revise their plans and strategies.

Answer: D
46) Which of the following is a financial budget?
A) budgeted balance sheet
B) cash receivables budget
C) production budget
D) cost of goods sold budget

Answer: A
47) Which of the following statements is true of budgets?
A) Master budgets express management's operating and financial plans.
B) Financial budgets are prepared before the master budget is prepared.
C) Operating budgets are prepared independently of the master budget.
D) The budgeted balance sheet is the first budget prepared as management is very much concerned with projected financial position
Answer: A
48) Orange Corporation has budgeted sales of 23,000 units, targeted ending finished goods inventory of 9,000 units, and beginning finished goods inventory of 6,000 units. How many units should be purchased next year?
A) 38,000 units
B) 32,000 units
C) 26,000 units
D) 23,000 units

Answer: C
Explanation: Number of units to be purchased next year $=23,000$ units (estimated sales) $+9,000$ units (budgeted ending inventory) $-6,000$ units (opening inventory) $=$
49) Wallace Company provides the following data for next year:

| Month | Budgeted Sales |
| :--- | :---: |
| January | $\$ 120,000$ |
| February | 108,000 |
| March | 140,000 |
| April | 147,000 |

The gross profit rate is $35 \%$ of sales. Inventory at the end of December is $\$ 29,600$ and target ending inventory levels are $10 \%$ of next month's sales, stated at cost.

What is the amount of purchases budgeted for January?
A) $\$ 70,980$
B) $\$ 55,420$
C) $\$ 78,000$
D) $\$ 85,020$

Answer: B


Explanation: Budgeted purchases for January = \$55,420 (\$78,000* - \$29,600 + \$7,020**)
*\$120,000 $\times(100 \%-35 \%)=\$ 78,000$
** $\$ 108,000 \times(100 \%-35 \%) \times 10 \%=\$ 7,020$
50) The following information pertains to Monroe Company:

| Month | Sales | Purchases |
| :--- | ---: | :--- |
| January | $\$ 67,000$ | $\$ 32,000$ |
| February | $\$ 88,000$ | $\$ 45,000$ |
| March | $\$ 100,000$ | $\$ 58,000$ |

-Cash is collected from customers in the following manner:
Month of sale
30\%
Month following the sale $70 \%$
$\cdot 40 \%$ of purchases are paid for in cash in the month of purchase, and the balance is paid the following month.
$\cdot$ Labor costs are $20 \%$ of sales. Other operating costs are $\$ 37,000$ per month (including $\$ 8,000$ of depreciation). Both of these are paid in the month incurred.
$\cdot$ The cash balance on March 1 is $\$ 10,000$. A minimum cash balance of $\$ 6,000$ is required at the end of the month. Money can be borrowed in multiples of $\$ 1,000$.

How much cash will be collected from customers in March?
A) $\$ 96,400$
B) $\$ 91,600$
C) $\$ 100,000$
D) $\$ 118,000$

Answer: B
Explanation: $(\$ 88,000 \times 70 \%)+(\$ 100,000 \times 30 \%)=\$ 91,600$
51) The following information pertains to Monroe Company:

| Month | Sales | Purchases |
| :--- | ---: | :--- |
| January | $\$ 63,000$ | $\$ 40,000$ |
| February | $\$ 86,000$ | $\$ 40,000$ |
| March | $\$ 102,000$ | $\$ 56,000$ |

-Cash is collected from customers in the following manner:
Month of sale 35\%
Month following the sale $65 \%$
$\cdot 40 \%$ of purchases are paid for in cash in the month of purchase, and the balance is paid the following month.
$\cdot$ Labor costs are $30 \%$ of sales. Other operating costs are $\$ 38,000$ per month (including $\$ 8,000$ of depreciation). Both of these are paid in the month incurred.
$\cdot T h e$ cash balance on March 1 is $\$ 8,000$. A minimum cash balance of $\$ 6,000$ is required at the end of the month. Money can be borrowed in multiples of $\$ 1,000$. How much cash will be paid to suppliers in March?
A) $\$ 46,400$
B) $\$ 56,000$
C) $\$ 96,000$
D) $\$ 102,400$

Answer: A
Explanation: $\quad(\$ 40,000 \times 60 \%)+(\$ 56,000 \times 40 \%)=\$ 46,400$
52) The following information pertains to Monroe Company:

| Month | Sales |  | Purchases |
| :--- | ---: | :--- | :--- |
| January | P62,000 | $\$ 33,000$ |  |
| February | $\$ 84,000$ | $\$ 42,000$ |  |
| March | $\$ 101,000$ | $\$ 61,000$ |  |

- Cash is collected from customers in the following manner:

Month of sale $40 \%$
Month following the sale $60 \%$
$-45 \%$ of purchases are paid for in cash in the month of purchase, and the balance is paid the following month.

- Labor costs are $30 \%$ of sales. Other operating costs are $\$ 38,000$ per month (including \$10,000 of depreciation). Both of these are paid in the month incurred.
- The cash balance on March 1 is $\$ 8,000$. A minimum cash balance of $\$ 6,000$ is required at the end of the month. Money can be borrowed in multiples of $\$ 1,000$.

How much cash will be disbursed in total in March?
A) $\$ 58,300$
B) $\$ 68,300$
C) $\$ 108,850$
D) $\$ 118,850$

Answer: C Explanation: $(\$ 42,000 \times 55 \%)+(\$ 61,000 \times 45 \%)+(\$ 101,000 \times 30 \%)+$ $(\$ 38,000-\$ 10,000)=\$ 108,850$
53) The following information pertains to Monroe Company:

| Month | $\underline{\text { Sales }}$ |  |
| :--- | ---: | :--- |
| Punchases <br> February | $\$ 68,000$ | $\$ 35,000$ |
| March | $\$ 106,000$ | $\$ 46,000$ |
|  | $\$ 58,000$ |  |

- Cash is collected from customers in the following manner:

Month of sale 30\%
Month following the sale 70\%
$-45 \%$ of purchases are paid for in cash in the month of purchase, and the balance is paid the following month.

- Labor costs are $20 \%$ of sales. Other operating costs are $\$ 32,000$ per month (including $\$ 8,000$ of depreciation). Both of these are paid in the month incurred.
- The cash balance on March 1 is $\$ 8,900$. A minimum cash balance of $\$ 6,000$ is required at the end of the month. Money can be borrowed in multiples of $\$ 1,000$.

What is the ending cash balance for March?
A) $\$ 8,900$
B) $\$ 5,200$
C) $\$ 5,000$
D) $\$ 6,000$

Answer: D
Explanation: $\$ 8,900+\$ 92,700-\$ 96,600+\$ 1,000=\$ 6,000$

