

Check list

Video	Done	Comment
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

Budget: is a detailed plan for the future that is usually expressed in formal quantitative terms.

Why do companies create budgets?

1-Planning: involve developing goals and preparing various budgets to achieve those goals

2-Controlling: involves gathering feedback to ensure that the plan is being properly executed or modified as circumstances changes

advantages of budgeting:

1-budgets communicates management's plan throughout the organization.

2-budgets force managers to think about and plan for the future.

3-the budgeting process provides a means of allocating resources to those parts of the organization where they can be used more effectively.

4- the budgeting process can uncover potential bottlenecks before they occur.

5-budgets coordinate the activities of the entire organization but integrating the plans of its various parts. Budgeting helps to ensure that everyone in the organization is pulling in the same direction.

6-budgets define goals and objectives that can serve as benchmarks for evaluating subsequent performance.

Self-imposed budget or participative budget: is a budget that is prepared with the full cooperation and participation of managers at all levels

Advantages:

1-individuals at all levels of the organization are recognized as members of the team whose views and judgments are valued by top management.

2-budgets estimates prepared by front-line managers are often more accurate and reliable than estimates prepared by top managers who have less intimate knowledge of markets and day to day operations.

3-motivation is generally higher when individuals participate in setting their own goals than when the goals are imposed from above. Self-imposed budgets create commitment.

4- a manager who is not able to meet a budget that has been imposed from above can always say that the budget was unrealistic and impossible to meet. With a self-imposed budget, this claim cannot be made.

Limitations:

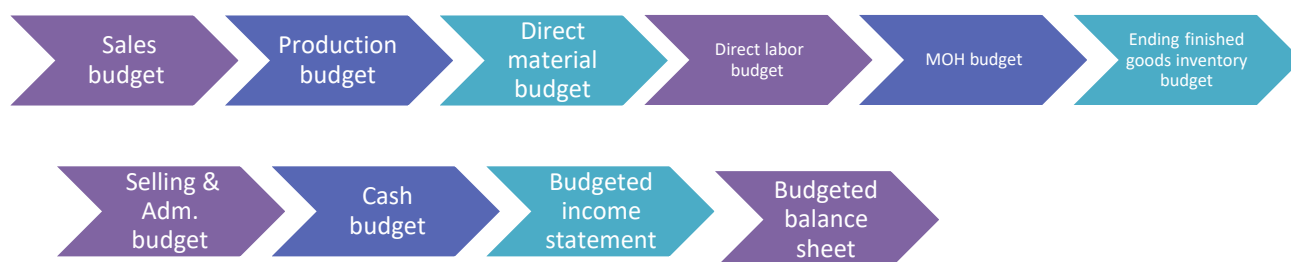
1-lowe level manager may make suboptimal budgeting recommendations if they lack the broad strategic perspective possessed by top managers.

2-self-imposed budgeting may allow lower level managers to create too much budgetary slack.

1	The basic idea underlying responsibility accounting is that a manager should be held responsible for those items—and only those items—that the manager can actually control to a significant extent.	TRUE
2	One disadvantage of budgeting is that budgeting makes it more difficult to coordinate the activities of the entire organization.	FALSE
3	Control involves developing goals and preparing various budgets to achieve those goals.	FALSE
4	A continuous or perpetual budget is a 12-month budget that rolls forward one month (or quarter) as the current month (or quarter) is completed.	TRUE
5	One of the weaknesses of budgets is that they are of little value in uncovering potential bottlenecks.	FALSE
6	A benefit from budgeting is that it forces managers to think about and plan for the future.	TRUE

2

Maser budget: consist of a number of separate but interdependent budgets that formally lay out the company's sales, production and financial goals.



Cash budgets: is a detailed plan showing how cash resources will be acquired and used

Budgeted income statement: provides an estimate of net income for the budget period and it relies in information from the sales budget, ending finished goods inventory budget, selling and administrative expense budget and the cash budget

Balance sheet budget: estimates a company's assets, liabilities and equity at the end of a budget period.

1) The usual starting point for a master budget is:

- A) the direct materials purchase budget.
- B) the budgeted income statement.
- C) the sales forecast or sales budget.**
- D) the production budget.

2) Which of the following budgets are prepared before the sales budget?

	Budgeted Income Statement	Direct Labor Budget
A)	Yes	Yes
B)	Yes	No
C)	No	Yes
D)	No	No

- A) Choice A
- B) Choice B
- C) Choice C
- D) Choice D**

1	The budgeted income statement is typically prepared before the budgeted balance sheet.	TRUE
2	The cash budget is the starting point in preparing the master budget.	FALSE
3	The master budget consists of a number of separate but interdependent budgets.	TRUE
4	The production budget is typically prepared prior to the sales budget.	FALSE
5	The production budget is typically prepared before the direct materials budget.	TRUE
6	The selling and administrative budget is typically prepared before the cash budget.	TRUE

3

Hampton freeze company make popsicles using only natural ingredients

The company's business is highly seasonal, most of its sales occur in summer and spring

THE SALES BUDGET

Hampton Freeze budgeted quarterly unit sales are 10,000, 30,000, 40,000 and 20,000 cases. Its budgeted selling price is 20\$ per case.

Hampton Freeze, Inc. Sales Budget For the year ended December 31,2017					
	Quarter				year
	1	2	3	4	
Budgeted unit	10,000	30,000	40,000	20,000	100,000
Selling price per unit	\$20	\$20	\$20	\$20	\$20
Total sales	\$200,000	\$600,000	\$800,000	\$400,000	\$2000,000

The company expected to collect 70% of its credit sales in the quarter of sales, and the remaining 30% of credit sales will be collected in the quarter after sale.

Schedule of expected cash collection					
	Quarter				year
	1	2	3	4	

4

E8-1 (schedule of expected cash collections)

Silver Company makes a product that is very popular as a Mother's Day gift. Thus, peak sales occur in May of each year, as shown in the company's sales budget for the second quarter given below:

	April	May	June	Total
Budgeted sales (all on account)	300,000	500,000	200,000	1,000,000

From past experience, the company has learned that 20% of a month's sales are collected in the month of sale, another 70% are collected in the month following sale, and the remaining 10% are collected in the second month following sale. Bad debts are negligible and can be ignored. February sales totaled \$230,000, and March sales totaled \$260,000

Required:

- 1- prepare a schedule of expected cash collections from sales by month and in total, for the second quarter.
- 2- What is the accounts receivable balance on June 30th?

1	Cash collections in a schedule of cash collections typically consist of collections on sales made to customers in prior periods plus collections on sales made in the current budget period.	TRUE
---	--	------

1) All of Gaylord Corporation's sales are on account. Thirty-five percent of the sales on account are collected in the month of sale, 45% in the month following sale, and the remainder are collected in the second month following sale. The following are budgeted sales data for the company:

	January	February	March	April
Total sales	\$50,000	\$60,000	\$40,000	\$30,000

What is the amount of cash that should be collected in March?

- A) \$24,000
- B) \$37,000
- C) \$41,000
- D) \$51,000**

2) The LaPann Corporation has obtained the following sales forecast data:

	July	August	September	October
Cash sales	\$ 80,000	\$ 70,000	\$ 50,000	\$ 60,000
Credit sales	\$ 240,000	\$ 220,000	\$ 180,000	\$ 200,000

The regular pattern of collection of credit sales is 20% in the month of sale, 70% in the month following the month of sale, and the remainder in the second month following the month of sale. There are no bad debts.

The budgeted accounts receivable balance on September 30 would be:

- A) \$126,000
- B) \$148,000
- C) \$166,000**
- D) \$190,000

The budgeted cash receipts for October would be:

- A) \$188,000
- B) \$248,000**
- C) \$226,000
- D) \$278,000

3) Corvi Corporation produces and sells one product. The budgeted selling price per unit is \$126. Budgeted unit sales are shown below:

	July	August	September	October
Budgeted unit sales	7,300	11,500	14,200	12,100

All sales are on credit with 40% collected in the month of the sale and 60% in the following month. The expected cash collections for August is closest to:

- A) \$551,880
- B) \$579,600
- C) \$919,800
- D) \$1,131,480**

4) Sirignano Corporation produces and sells one product. The budgeted selling price per unit is \$84. Budgeted unit sales for October, November, December, and January are 8,400, 12,000, 13,800, and 14,300 units, respectively. All sales are on credit with 40% collected in the month of the sale and 60% in the following month. The expected cash collections for November is closest to:

- A) **\$826,560**
- B) \$705,600
- C) \$423,360
- D) \$403,200

5) The LaGrange Corporation had the following budgeted sales for the first half of the current year:

	Cash Sales	Credit Sales
January	\$ 70,000	\$ 340,000
February	\$ 50,000	\$ 190,000
March	\$ 40,000	\$ 135,000
April	\$ 35,000	\$ 120,000
May	\$ 45,000	\$ 160,000
June	\$ 40,000	\$ 140,000

The company is in the process of preparing a cash budget and must determine the expected cash collections by month. To this end, the following information has been assembled:

Collections on sales:

60% in month of sale

30% in month following sale

10% in second month following sale

The accounts receivable balance on January 1 of the current year was \$70,000, of which \$50,000 represents uncollected December sales and \$20,000 represents uncollected November sales.

What is the budgeted accounts receivable balance on May 30?

- A) \$56,000
- B) \$64,000
- C) **\$76,000**
- D) \$132,000

6) The BRS Corporation makes collections on sales according to the following schedule:

- 30% in month of sale
- 60% in month following sale
- 10% in second month following sale

The following sales have been budgeted:

	Sales
April	\$ 140,000
May	\$ 130,000
June	\$ 150,000

Budgeted cash collections in June would be:

- A) **\$137,000**
- B) \$85,000
- C) \$45,000
- D) \$123,000

9) Hesterman Corporation makes one product and has provided the following information to help prepare the master budget for the next four months of operations:

Budgeted selling price per unit	\$	118
Budgeted unit sales (all on credit):		
April		7,800
May		9,400
June		14,000
July		12,100

Raw materials requirement per unit of output		3 pounds
Raw materials cost	\$	3.00 per pound
Direct labor requirement per unit of output		2.8 direct labor-hours
Direct labor wage rate	\$	25.00 per direct labor-hour

Credit sales are collected:

- 40% in the month of the sale
- 60% in the following month

The ending finished goods inventory should equal 40% of the following month's sales. The ending raw materials inventory should equal 20% of the following month's raw materials production needs.

The expected cash collections for May is closest to:

- A) \$920,400
- B) **\$995,920**
- C) \$552,240
- D) \$443,680

5

The production budget

The production budget based on the assumption that Hampton Freeze will maintain ending finished goods inventory equal to 20% of the next quarter's unit sales, the ending inventory last quarter is 2,000. The expected ending finished goods inventory in Q1= 6,000 Q2=8,000 Q3=4,000 Q4=1000

Hampton Freeze, Inc. production Budget For the year ended December 31,2017					
	Quarter				year
	1	2	3	4	year

Inventory purchases – merchandising company

Budgeted cost of goods sold + desired ending merchandise inventory = total needs

Less: beginning merchandise inventory = required purchase

1	The number of units to be produced in a period can be determined by adding the expected sales to the desired ending inventory and then deducting the beginning inventory.	TRUE
2	In a production budget, if the number of units in finished goods inventory at the end of the period is less than the number of units in finished goods inventory at the beginning of the period, then the expected number of units sold is less than the number of units to be produced during the period.	FALSE
3	In the merchandise purchases budget, the required purchases (in units) for a period can be determined by subtracting the beginning merchandise inventory (in units) from the budgeted sales (in units) and desired ending merchandise inventory (in units).	TRUE

1) There are various budgets within the master budget. One of these budgets is the production budget. Which of the following BEST describes the production budget?

- A) It details the required direct labor hours.
- B) It details the required raw materials purchases.
- C) It is calculated based on the sales budget and the desired ending inventory.**
- D) It summarizes the costs of producing units for the budget period.

2) Parwin Corporation plans to sell 23,000 units during August. If the company has 8,000 units on hand at the start of the month, and plans to have 9,000 units on hand at the end of the month, how many units must be produced during the month?

- A) 24,000**
- B) 22,000
- C) 32,000
- D) 31,000

3) Stut Corporation, a retailer, plans to sell 28,000 units of Product X during the month of August. If the company has 6,000 units on hand at the start of the month, and plans to have 9,000 units on hand at the end of the month, how many units of Product X must be purchased from the supplier during the month?

- A) 37,000
- B) 25,000
- C) 31,000**
- D) 28,000

4) Douglas Corporation plans to sell 24,000 units of Product A during July and 30,000 units during August. Sales of Product A during June were 25,000 units. Past experience has shown that end-of-month inventory should equal 3,000 units plus 30% of the next month's sales. On June 30 this requirement was met. Based on these data, how many units of Product A must be produced during the month of July?

- A) 28,800
- B) 22,200
- C) 24,000
- D) 25,800**

6

EXERCISE 8-2 (Production budget)

Down Under Products, Ltd., of Australia has budgeted sales of its popular boomerang for the next four months as follows:

	Unit sales
April	50,000
May	75,000
June	90,000
July	80,000

The company is now in the process of preparing a production budget for the second quarter. Past experience has shown that end-of-month inventory levels must equal 10% of the following month's unit sales. The inventory at the end of March was 5,000 units.

Required:

prepare a production budget by month and in total, for the second quarter.

1) Frolic Corporation has budgeted sales and production over the next quarter as follows:

	July	August	September
Sales in units	70,000	83,000	?
Production in units	73,250	84,750	91,750

The company has 17,500 units of product on hand at July 1. 25% of the next month's sales in units should be on hand at the end of each month. October sales are expected to be 97,000 units. Budgeted sales for September would be (in units):

- A) 88,000
- B) 90,000**
- C) 86,000
- D) 84,000

2) The following information was taken from the production budget of Piwte Corporation for next quarter:

	January	February	March
Units to be produced	128,000	140,000	152,000
Desired ending inventory of finished goods	30,000	36,000	38,000

How many units is the company expecting to sell in the month of February?

- A) 132,000
- B) 138,000
- C) 135,000
- D) 134,000**

3) Fiwrt Corporation manufactures and sells stainless steel coffee mugs. Expected mug sales Fiwrt (in units) for the next three months are as follows:

	October	November	December
Budgeted unit sales	30,000	36,000	34,000

Fiwrt likes to maintain a finished goods inventory equal to 30% of the next month's estimated sales. How many mugs should Fiwrt plan on producing during the month of November?

- A) 35,400 mugs**
- B) 26,800 mugs
- C) 36,000 mugs
- D) 34,300 mugs

4) The following information relates to Mapfes Manufacturing Corporation for next quarter:

	January	February	March
Expected sales (in units)	440,000	390,000	380,000
Desired ending finished goods inventory (in units)	39,000	38,000	40,000

How many units should the company plan on producing for the month of February?

- A) 428,000 units
- B) 391,000 units
- C) 390,000 units
- D) 389,000 units**

5) Jannusch Corporation makes one product. Budgeted unit sales for July, August, September, and October are 10,000, 11,600, 13,300, and 12,700 units, respectively. The ending finished goods inventory should equal 20% of the following month's sales. The budgeted required production for August is closest to:

- A) 11,600 units
- B) 11,940 units**
- C) 14,260 units
- D) 16,580 units

6) Paradise Corporation budgets on an annual basis for its fiscal year. The following beginning and ending inventory levels (in units) are planned for next year.

	Beginning Inventory	Ending Inventory
Raw material*	30,000	40,000
Finished goods	70,000	60,000

* Three pounds of raw material are needed to produce each unit of finished product.

If Paradise Corporation plans to sell 510,000 units during next year, the number of units it would have to manufacture during the year would be:

- A) 500,000 units**
- B) 520,000 units
- C) 510,000 units
- D) 570,000 units

7) Roberts Enterprises has budgeted sales in units for the next five months as follows:

June	4,500	units
July	7,100	units
August	5,300	units
September	6,700	units
October	3,700	units

Past experience has shown that the ending inventory for each month must be equal to 10% of the next month's sales in units. The inventory on May 31 contained 410 units. The company needs to prepare a production budget for the second quarter of the year.

The beginning inventory in units for September is:

- A) 370 units
- B) 6,700 units
- C) 530 units
- D) 670 units**

The total number of units to be produced in July is:

- A) 7,630 units
- B) 7,100 units
- C) 6,920 units**
- D) 7,280 units

The desired ending inventory for August is:

- A) 530 units
- B) 670 units**
- C) 710 units
- D) 370 units

8) Marty's Merchandise has budgeted sales as follows for the second quarter of the year:

April	\$ 30,000
May	\$ 60,000
June	\$ 50,000

Cost of goods sold is equal to 70% of sales. The company wants to maintain a monthly ending inventory equal to 120% of the cost of goods sold for the following month. The inventory on March 31 was below this target and was only \$22,000. The company is now preparing a Merchandise Purchases Budget for April, May, and June.

The desired beginning inventory for June is:

- A) **\$42,000**
- B) \$35,000
- C) \$50,000
- D) \$38,000

The budgeted purchases for May are:

- A) \$49,400
- B) \$50,400
- C) \$60,000
- D) **\$33,600**

9) On October 1, Gala Corporation has 300 units of Product XYZ on hand. The company plans to sell 1,200 units of Product XYZ during October, and plans to have 500 units on hand October 31. How many units of Product XYZ must be produced during October?

- A) **1,400**
- B) 1,500
- C) 1,000
- D) 2,000

10) BW Department Store expects to generate the following sales for the next three months:

	July	August	September
Expected sales	\$490,000	\$540,000	\$580,000

BW's cost of goods sold is 60% of sales dollars. At the end of each month, BW wants a merchandise inventory balance equal to 25% of the following month's expected cost of goods sold. What dollar amount of merchandise inventory should BW plan to purchase in August?

- A) **\$330,000**
- B) \$314,600
- C) \$352,800
- D) \$327,800

1	When preparing a direct materials budget, beginning inventory for raw materials should be added to production needs, and desired ending inventory should be subtracted to determine the amount of raw materials to be purchased.	FALSE
---	--	-------

1) Sleeter Corporation makes one product and it provided the following information to help prepare the master budget for the next four months of operations:

- a. Budgeted unit sales for April, May, June, and July are 7,500, 11,900, 10,800, and 14,800 units, respectively. All sales are on credit.
- b. The ending finished goods inventory equals 30% of the following month's sales.
- c. The ending raw materials inventory equals 30% of the following month's raw materials production needs. Each unit of finished goods requires 6 pounds of raw materials. The raw materials cost \$5.00 per pound.

If 72,000 pounds of raw materials are required for production in June, then the budgeted cost of raw material purchases for May is closest to:

- A) \$559,230
- B) \$455,100
- C) \$350,970**
- D) \$347,100

3) Sill Corporation makes one product. Budgeted unit sales for January, February, March, and April are 9,900, 11,400, 11,900, and 13,400 units, respectively. The ending finished goods inventory equals 20% of the following month's sales. The ending raw materials inventory equals 40% of the following month's raw materials production needs. Each unit of finished goods requires 5 pounds of raw materials. If 61,000 pounds of raw materials are required for production in March, then the budgeted raw material purchases for February is closest to:

- A) 58,900 pounds**
- B) 104,900 pounds
- C) 57,500 pounds
- D) 81,900 pounds

4) Catano Corporation pays for 40% of its raw materials purchases in the month of purchase and 60% in the following month. If the budgeted cost of raw materials purchases in July is \$256,550 and in August is \$278,050, then in August the total budgeted cash disbursements for raw materials purchases is closest to:

- A) \$265,150**
- B) \$153,930
- C) \$166,830
- D) \$111,220

8

EXERCISE 8-3 (Direct Materials Budget)

Three grams of musk oil are required for each bottle of Mink Caress, a very popular perfume made by a small company in western Siberia. The cost of the musk oil is \$1.50 per gram. Budgeted production of Mink Caress is given below by quarters for Year 2 and for the first quarter of Year 3

	Year 2				Year 3
	First	Second	Third	Fourth	First
Budgeted production, in bottles	60,000	90,000	150,000	100,000	70,000

Musk oil has become so popular as a perfume ingredient that it has become necessary to carry large inventories as a precaution against stock-outs. For this reason, the inventory of musk oil at the end of a quarter must be equal to 20% of the following quarter's production needs. Some 36,000 grams of musk oil will be on hand to start the first quarter of Year 2

Required:

Prepare a direct materials budget for Musk oil, by quarter and in total for year 2.

1) Dustman Manufacturing Corporation's most recent production budget indicates the following required production:

	January	February	March	April
Required production (units)	4,000	6,000	5,500	5,000

Each unit of finished product requires 3 feet of raw materials. The company maintains raw materials inventory equal to 2,000 feet plus 10% of the next month's expected production needs. The raw material used in Dustman Manufacturing Corporation's product costs \$4.50 per foot. What is the value of raw material that Dustman Manufacturing should plan on purchasing for the month of February?

- A) \$73,575
- B) \$74,250
- C) \$81,000
- D) \$80,325**

2) Sarafiny Corporation is in the process of preparing its annual budget. The following beginning and ending inventory levels are planned for the year.

	Beginning Inventory	Ending Inventory
Finished goods (units)	20,000	30,000
Raw material (grams)	50,000	40,000

Each unit of finished goods requires 7 grams of raw material. The company plans to sell 270,000 units during the year

The number of units the company would have to manufacture during the year would be:

- A) 300,000 units
- B) 270,000 units
- C) 260,000 units
- D) 280,000 units**

How much of the raw material should the company purchase during the year?

- A) 1,960,000 grams
- B) 1,950,000 grams**
- C) 1,970,000 grams
- D) 2,000,000 grams

3) The following are budgeted data:

	January	February	March
Sales in units	15,000	20,000	18,000
Production in units	18,000	19,000	16,000

One pound of material is required for each finished unit. The inventory of materials at the end of each month should equal 20% of the following month's production needs. Purchases of raw materials for February would be budgeted to be:

- A) 19,600 pounds
- B) 20,400 pounds
- C) 18,400 pounds**
- D) 18,600 pounds

4) Acti Manufacturing Corporation is estimating the following raw material purchases for the final four months of the year:

September	\$ 830,000
October	\$ 940,000
November	\$ 860,000
December	\$ 780,000

At Acti, 40% of raw materials purchases are normally paid for in the month of purchase. The remaining 60% is paid for in the month following the purchase.

How much cash should Acti expect to pay out for raw material purchases during November?

- A) **\$908,000**
- B) \$438,000
- C) \$564,000
- D) \$344,000

In Acti's budgeted balance sheet at December 31, at what amount will accounts payable for raw materials be shown?

- A) \$780,000
- B) \$564,000
- C) **\$468,000**
- D) \$588,000

5) The Tobler Corporation has budgeted production for next year as follows:

	Quarter			
	First	Second	Third	Fourth
Production in units	10,000	12,000	16,000	14,000

Four pounds of raw materials are required for each unit produced. Raw materials on hand at the start of the year total 4,000 pounds. The raw materials inventory at the end of each quarter should equal 10% of the next quarter's production needs. Budgeted purchases of raw materials in the third quarter would be:

- A) **63,200 pounds**
- B) 62,400 pounds
- C) 56,800 pounds
- D) 50,400 pounds

6) Marst Corporation's budgeted production in units and budgeted raw materials purchases over the next three months are given below:

	January	February	March
Budgeted production (in units)	70,000	?	80,000
Budgeted raw materials purchases (in pounds)	142,400	151,600	158,800

Two pounds of raw materials are required to produce one unit of product. The company wants raw materials on hand at the end of each month equal to 30% of the following month's production needs. The company is expected to have 42,000 pounds of raw materials on hand on January 1. Budgeted production for February should be:

- A) 103,400 units
- B) 80,600 units
- C) 80,000 units
- D) **74,000 units**

7) Bramble Corporation is a small wholesaler of gourmet food products. Data regarding the store's operations follow:

- Sales are budgeted at \$340,000 for November, \$320,000 for December, and \$310,000 for January.
- Collections are expected to be 80% in the month of sale and 20% in the month following the sale.
- The cost of goods sold is 75% of sales.
- The company would like to maintain ending merchandise inventories equal to 60% of the next month's cost of goods sold. Payment for merchandise is made in the month following the purchase.
- Other monthly expenses to be paid in cash are \$24,000.
- Monthly depreciation is \$15,000.
- Ignore taxes.

Balance Sheet
October 31

Assets	
Cash	\$ 20,000
Accounts receivable	70,000
Merchandise inventory	153,000
Property, plant and equipment, net of \$572,000 accumulated depreciation	1,094,000
Total assets	\$ 1,337,000
Liabilities and Stockholders' Equity	
Accounts payable	\$ 254,000
Common stock	820,000
Retained earnings	263,000
Total liabilities and stockholders' equity	\$ 1,337,000

Expected cash collections in December are:

- A) \$68,000
- B) \$256,000
- C) \$320,000
- D) \$324,000**

The cost of December merchandise purchases would be:

- A) \$255,000
- B) \$139,500
- C) \$235,500**
- D) \$240,000

December cash disbursements for merchandise purchases would be:

- A) \$139,500
- B) \$246,000**
- C) \$240,000
- D) \$235,500

Expected cash collections in December are:

- A) \$68,000
- B) \$256,000
- C) \$320,000
- D) \$324,500**

8) Hesterman Corporation makes one product and has provided the following information to help prepare the master budget for the next four months of operations:

Budgeted selling price per unit		\$	118
Budgeted unit sales (all on credit):			
April			7,800
May			9,400
June			14,000
July			12,100
Raw materials requirement per unit of output			3 pounds
Raw materials cost	\$		3.00 per pound
Direct labor requirement per unit of output			2.8 direct labor-hours
Direct labor wage rate	\$		25.00 per direct labor-hour

Credit sales are collected:
40% in the month of the sale
60% in the following month

The ending finished goods inventory should equal 40% of the following month's sales. The ending raw materials inventory should equal 20% of the following month's raw materials production needs.

The budgeted required production for May is closest to:

- A) **11,240 units**
- B) 9,400 units
- C) 15,000 units
- D) 18,760 units

If 39,720 pounds of raw materials are required for production in June, then the budgeted cost of raw material purchases for May is closest to:

- A) \$145,224
- B) \$124,992
- C) \$101,160
- D) **\$104,760**

8) When preparing a direct materials budget, the required purchases of raw materials in units equals:

- A) raw materials needed to meet the production schedule + desired ending inventory of raw materials – beginning inventory of raw materials.
- B) raw materials needed to meet the production schedule – desired ending inventory of raw materials – beginning inventory of raw materials.
- C) raw materials needed to meet the production schedule – desired ending inventory of raw materials + beginning inventory of raw materials.
- D) raw materials needed to meet the production schedule + desired ending inventory of raw materials + beginning inventory of raw materials.

9) Coles Corporation, Inc. makes and sells a single product, Product R. Three yards of Material K are needed to make one unit of Product R. Budgeted production of Product R for the next five months is as follows:

August	14,000 units
September	14,500 units
October	15,500 units
November	12,600 units
December	11,900 units

The company wants to maintain monthly ending inventories of Material K equal to 20% of the following month's production needs. On July 31, this requirement was not met since only 2,500 yards of Material K were on hand. The cost of Material K is \$0.85 per yard. The company wants to prepare a Direct Materials Purchase Budget for the rest of the year.

The total cost of Material K to be purchased in August is:

- A) **\$40,970**
- B) \$48,200
- C) \$33,840
- D) \$42,300

The desired ending inventory of Material K for September is:

- A) 7,560 yards
- B) 8,400 yards
- C) 8,700 yards
- D) **9,300 yards**

The total needs (i.e., production requirements plus desired ending inventory) of Material K for November are:

- A) 37,800 yards
- B) **44,940 yards**
- C) 37,380 yards
- D) 45,360 yards

9

The direct labor budget

the two key assumptions underlying the direct labor budget are that 0.40 direct labor-hours are required per case of popsicles and the direct labor cost per hour is \$15.

Hampton Freeze, Inc. Direct Labor Budget For the year ended December 31, 2017					
	Quarter				year
	1	2	3	4	year

Hampton Freeze has 25 workers who are classified as direct labor, but each of them is guaranteed at least 480 hours of pay each quarter at a rate of \$15 per hour. What is the minimum direct labor cost for a quarter ?

1	The direct labor budget begins with the required production in units from the production budget.	TRUE
2	The direct labor budget shows the direct labor-hours required to satisfy the production budget.	TRUE

1) Pabon Corporation makes one product. Budgeted unit sales for August and September are 11,100 and 12,600 units, respectively. The ending finished goods inventory equals 40% of the following month's sales. The direct labor wage rate is \$19.00 per hour. Each unit of finished goods requires 2.5 direct labor-hours. The estimated direct labor cost for August is closest to:

- A) \$389,000
- B) \$555,750**
- C) \$29,250
- D) \$222,300

2) Tracie Corporation manufactures and sells women's skirts. Each skirt (unit) requires 2.2 yards of cloth. Selected data from Tracie's master budget for next quarter are shown below:

	July	August	September
Budgeted sales (in units)	7,000	9,000	11,000
Budgeted production (in units)	8,000	10,500	13,000

Each unit requires 0.8 hours of direct labor, and the average hourly cost of Tracie's direct labor is \$18. What is the cost of Tracie Corporation's direct labor in September?

- A) \$198,000
- B) \$158,400
- C) \$187,200**
- D) \$234,000

10

EXERCISE 8-4 (Direct Labor Budget).

The production manager of Rordan Corporation has submitted the following quarterly production forecast for the upcoming fiscal year

	1 st quarter	2 nd quarter	3 rd quarter	4 th quarter
Units to be produced	8,000	6,500	7,000	7,500

Each unit requires 0.35 direct labor-hours, and direct laborers are paid \$12.00 per hour.

Required:

1. prepare the company's direct labor budget for the upcoming fiscal year. Assume that the direct labor workforce is adjusted each quarter to match the number of hours required to produce the forecasted number of units produced.

2 Prepare the company's direct labor budget for the upcoming fiscal year, assuming that the direct labor workforce is not adjusted each quarter. Instead, assume that the company's direct labor workforce consists of permanent employees who are guaranteed to be paid for at least 2,600 hours of work each quarter. If the number of required direct labor-hours is less than this number, the workers are paid for 2,600 hours anyway. Any hours worked in excess of 2,600 hours in a quarter are paid at the rate of 1.5 times the normal hourly rate for direct labor.

1) LBC Corporation makes and sells a product called Product WZ. Each unit of Product WZ requires 3.5 hours of direct labor at the rate of \$14.50 per direct labor-hour. Management would like you to prepare a Direct Labor Budget for June.

The company plans to sell 39,000 units of Product WZ in June. The finished goods inventories on June 1 and June 30 are budgeted to be 200 and 100 units, respectively. Budgeted direct labor costs for June would be:

- A) \$1,984,325
- B) \$1,974,175**
- C) \$1,979,250
- D) \$564,050

The budgeted direct labor cost per unit of Product WZ would be:

- A) \$50.75**
- B) \$14.50
- C) \$4.14
- D) \$18.00

2) Smith Corporation makes and sells a single product called a Pod. Each Pod requires 1.4 direct labor-hours at \$9.60 per direct labor-hour. The direct labor workforce is fully adjusted each month to the required workload. Smith Corporation is preparing a Direct Labor Budget for the second quarter of the year.

The budgeted direct labor cost per Pod is closest to:

- A) \$13.44**
- B) \$9.60
- C) \$7.38
- D) \$11.00

In June the company has budgeted to produce 22,000 Pods. Budgeted direct labor costs incurred in June would be:

- A) \$470,400
- B) \$295,680**
- C) \$240,000
- D) \$211,200

If the budgeted direct labor cost for April is \$201,600, then the budgeted production of Pods for April would be:

- A) 21,000 units
- B) 29,400 units
- C) 18,273 units
- D) 15,000 units**

3) Pooler Corporation is working on its direct labor budget for the next two months. Each unit of output requires 0.15 direct labor-hours. The direct labor rate is \$7.00 per direct labor-hour. The production budget calls for producing 6,500 units in April and 6,200 units in May. The company guarantees its direct labor workers a 40-hour paid work week. With the number of workers currently employed, that means that the company is committed to paying its direct labor work force for at least 1,000 hours in total each month even if there is not enough work to keep them busy. What would be the total combined direct labor cost for the two months?

- A) \$13,825.00
- B) \$13,335.00
- C) \$14,000.00**
- D) \$13,510.00

4) Depasquale Corporation is working on its direct labor budget for the next two months. Each unit of output requires 0.41 direct labor-hours. The direct labor rate is \$8.10 per direct labor-hour. The production budget calls for producing 5,000 units in May and 5,400 units in June. If the direct labor work force is fully adjusted to the total direct labor-hours needed each month, what would be the total combined direct labor cost for the two months?

- A) \$16,605.00
 B) \$17,933.40
 C) \$17,269.20
 D) **\$34,538.40**

5) Hesterman Corporation makes one product and has provided the following information to help prepare the master budget for the next four months of operations:

Budgeted selling price per unit	\$	118
Budgeted unit sales (all on credit):		
April		7,800
May		9,400
June		14,000
July		12,100

Raw materials requirement per unit of output	3 pounds
Raw materials cost	\$ 3.00 per pound
Direct labor requirement per unit of output	2.8 direct labor-hours
Direct labor wage rate	\$ 25.00 per direct labor-hour

Credit sales are collected:
 40% in the month of the sale
 60% in the following month

The ending finished goods inventory should equal 40% of the following month's sales. The ending raw materials inventory should equal 20% of the following month's raw materials production needs.

The estimated direct labor cost for May is closest to:

- A) **\$786,800**
 B) \$31,472
 C) \$534,000
 D) \$281,000

6) Rokosz Corporation makes one product and it provided the following information to help prepare the master budget for the next four months of operations:

- The budgeted selling price per unit is \$104. Budgeted unit sales for October, November, December, and January are 6,900, 7,100, 11,300, and 15,300 units, respectively. All sales are on credit.
- Regarding credit sales, 30% are collected in the month of the sale and 70% in the following month.
- The ending finished goods inventory equals 20% of the following month's sales.
- The ending raw materials inventory equals 30% of the following month's raw materials production needs. Each unit of finished goods requires 5 pounds of raw materials. The raw materials cost \$2.00 per pound.
- The direct labor wage rate is \$23.00 per hour. Each unit of finished goods requires 2.5 direct labor-hours.

The expected cash collections for November is closest to:

- \$502,320
- \$221,520
- \$723,840**
- \$717,600

The budgeted required production for November is closest to:

- 7,940 units**
- 10,780 units
- 9,360 units
- 7,100 units

If 60,500 pounds of raw materials are required for production in December, then the budgeted cost of raw material purchases for November is closest to:

- \$91,880**
- \$139,520
- \$79,400
- \$115,700

The estimated direct labor cost for November is closest to:

- \$320,000
- \$182,620
- \$456,550**
- \$19,850

12**EXERCISE 8-5 (Manufacturing Overhead Budget).**

The direct labor budget of Yuvwell Corporation for the upcoming fiscal year contains the following details concerning budgeted direct labor-hours:

	1 st quarter	2 nd quarter	3 rd quarter	4 th quarter
Budgeted direct labor hours	8,000	8,200	8,500	7,800

The company uses direct labor-hours as its overhead allocation base. The variable portion predetermined manufacturing overhead rate is \$3.25 per direct labor-hour and its total fixed manufacturing overhead is \$48,000 per quarter. The only noncash item included in fixed manufacturing overhead is depreciation, which is \$16,000 per quarter.

Required:

- 1- prepare the company's manufacturing overhead budget for the upcoming fiscal year.
- 2 Compute the company's predetermined overhead rate (including both variable and fixed manufacturing overhead) for the upcoming fiscal year.

1	In the manufacturing overhead budget, the non-cash charges (such as depreciation) are deducted from the total budgeted manufacturing overhead to determine the expected cash disbursements for manufacturing overhead.	TRUE
2	The manufacturing overhead budget lists all costs of production other than direct materials and direct labor.	TRUE

1) Which of the following statements is NOT correct concerning the Manufacturing Overhead Budget?

- A) The Manufacturing Overhead Budget provides a schedule of all costs of production other than direct materials and labor costs.
B) The Manufacturing Overhead Budget shows only the variable portion of manufacturing overhead.
 C) The Manufacturing Overhead Budget shows the expected cash disbursements for manufacturing overhead.
 D) The Manufacturing Overhead Budget is prepared after the Sales Budget.

2) The Charade Corporation is preparing its Manufacturing Overhead budget for the fourth quarter of the year. The budgeted variable manufacturing overhead is \$5.00 per direct labor-hour; the budgeted fixed manufacturing overhead is \$75,000 per month, of which \$15,000 is factory depreciation.

If the budgeted direct labor time for November is 7,000 hours, then the total budgeted manufacturing overhead for November is:

- A) \$95,000
B) \$110,000
 C) \$75,000
 D) \$125,000

If the budgeted cash disbursements for manufacturing overhead for December total \$105,000, then the budgeted direct labor-hours for December must be:

- A) 6,000 direct labor-hours
 B) 21,000 direct labor-hours
C) 9,000 direct labor-hours
 D) 3,000 direct labor-hours

If the budgeted direct labor time for December is 8,000 hours, then average budgeted manufacturing overhead per direct labor-hour is closest to:

- A) \$14.38 per direct labor-hour**
 B) \$9.38 per direct labor-hour
 C) \$12.50 per direct labor-hour
 D) \$16.25 per direct labor-hour

3) The manufacturing overhead budget at Polich Corporation is based on budgeted direct labor-hours. The direct labor budget indicates that 1,600 direct labor-hours will be required in February. The variable overhead rate is \$3.40 per direct labor-hour. The company's budgeted fixed manufacturing overhead is \$28,320 per month, which includes depreciation of \$3,680. All other fixed manufacturing overhead costs represent current cash flows.

The company recomputes its predetermined overhead rate every month. The predetermined overhead rate for February should be:

- A) \$3.40 per direct labor-hour
- B) \$21.10 per direct labor-hour**
- C) \$17.70 per direct labor-hour
- D) \$18.80 per direct labor-hour

The February cash disbursements for manufacturing overhead on the manufacturing overhead budget should be:

- A) \$24,640
- B) \$33,760
- C) \$30,080**
- D) \$5,440

13**The ending finished goods inventory budget**

Hampton Freeze, Inc.
Ending finished goods inventory budget
For the year ended December 31,2017

Hampton Freeze, Inc. Ending finished goods inventory budget For the year ended December 31,2017			

1	The selling and administrative expense budget lists all costs of production other than direct materials and direct labor.	FALSE
2	The budgeted variable selling and administrative expense is calculated by multiplying the budgeted unit sales by the variable selling and administrative expense per unit.	TRUE

1) KAB Inc., a small retail store, had the following results for May. The budgets for June and July are also given.

	May (actual)	June (budget)	July (budget)
Sales	\$ 42,000	\$ 40,000	\$ 45,000
Less cost of goods sold	<u>21,000</u>	<u>20,000</u>	<u>22,500</u>
Gross margin	21,000	20,000	22,500
Less selling and administrative expenses	<u>20,000</u>	<u>20,000</u>	<u>20,000</u>
Net operating income	<u>\$ 1,000</u>	<u>\$ 0</u>	<u>\$ 2,500</u>

Sales are collected 80% in the month of the sale and the balance in the month following the sale. (There are no bad debts.) The goods that are sold are purchased in the month prior to sale. Suppliers of the goods are paid in the month following the sale. The "selling and administrative expenses" are paid in the month of the sale.

The amount of cash collected during June should be:

- A) \$32,000
- B) \$40,000
- C) \$40,400**
- D) \$41,000

The cash disbursements during June for goods purchased for sale and for selling and administrative expenses should be:

- A) \$40,000
- B) \$41,000**
- C) \$42,500
- D) \$43,500

2) Schuepfer Inc. bases its selling and administrative expense budget on budgeted unit sales. The sales budget shows 1,300 units are planned to be sold in March. The variable selling and administrative expense is \$4.20 per unit. The budgeted fixed selling and administrative expense is \$19,240 per month, which includes depreciation of \$3,380 per month. The remainder of the fixed selling and administrative expense represents current cash flows. The cash disbursements for selling and administrative expenses on the March selling and administrative expense budget should be:

- A) \$15,860
- B) \$5,460
- C) \$24,700
- D) \$21,320**

15

EXERCISE 8-6 (Selling and Administrative Expense Budget).

Weller Company's budgeted unit sales for the upcoming fiscal year are provided below:

	1 st quarter	2 nd quarter	3 rd quarter	4 th quarter
Budgeted unit sales	15,000	16,000	14,000	13,000

The company's variable selling and administrative expense per unit is \$2.50. Fixed selling and administrative expenses include advertising expenses of \$8,000 per quarter, executive salaries of \$35,000 per quarter, and depreciation of \$20,000 per quarter. In addition, the company will make insurance payments of \$5,000 in the first quarter and \$5,000 in the third quarter. Finally, property taxes of \$8,000 will be paid in the second quarter.

Required:

prepare the company's selling and administrative expense budget for the upcoming fiscal year.

1) Yerkey Corporation makes one product and has provided the following information to help prepare the master budget:

Budgeted unit sales, February	10,700	units
Variable selling and administrative expense	\$ 2.00	per unit sold
Fixed selling and administrative expense	\$ 60,000	per month

The estimated selling and administrative expense for February is closest to:

- A) **\$81,400**
- B) \$21,400
- C) \$54,270
- D) \$60,000

2) The Puyer Corporation makes and sells only one product called a Deb. The company is in the process of preparing its Selling and Administrative Expense Budget for next year. The following budget data are available:

	Monthly Fixed Cost	Variable Cost Per Deb Sold
Sales commissions		\$ 0.90
Shipping		\$ 1.40
Advertising	\$ 50,000	\$ 0.20
Executive salaries	\$ 60,000	
Depreciation on office equipment	\$ 20,000	
Other	\$ 40,000	

All of these expenses (except depreciation) are paid in cash in the month they are incurred.

If the company has budgeted to sell 16,000 Debs in January, then the total budgeted variable selling and administrative expenses for January will be:

- A) \$17,600
- B) \$25,600
- C) **\$40,000**
- D) \$36,800

If the company has budgeted to sell 15,000 Debs in February, then the total budgeted fixed selling and administrative expenses for February is:

- A) \$120,000
- B) \$130,000
- C) \$150,000
- D) **\$170,000**

If the company has budgeted to sell 17,000 Debs in March, then the average budgeted selling and administrative expenses per unit sold for March is closest to:

- A) **\$12.50 per unit**
- B) \$2.50 per unit
- C) \$10.00 per unit
- D) \$17.00 per unit

If the budgeted cash disbursements for selling and administrative expenses for April total \$195,500, then how many Debs does the company plan to sell in April?

- A) 14,400 units
- B) 8,000 units
- C) 10,200 units
- D) **18,200 units**

16**The cash budget**Cash budget:

- 1-the cash receipts section.
- 2-the cash disbursements section.
- 3-the cash excess or deficiency section

- total cash available = Beginning cash balance + cash receipts
- excess (deficiency) of cash available over disbursement = total cash available - Cash disbursement

4-the financing section

- **Required borrowing at the beginning of the first quarter (minimum required borrowing):**
Desired ending cash balance + deficiency of cash available over disbursements
- **Interest:**
Loan * interest * quarters

The company expects to maintain a minimum cash balance each quarter of \$30,000; it plans to make quarterly equipment purchases of \$50,000, \$40,000, \$20,000, and \$20,000; it plans to pay quarterly dividends of \$8,000; and it expects to pay simple interest on borrowed money of 3% per quarter.

Hampton Freeze, Inc. Cash budget For the year ended December 31, 2017					
	Quarter				year
	1	2	3	4	

17

Exercise 8-7 (cash budget)

Garden Depot is a retailer that is preparing its budget for the upcoming fiscal year. Management has prepared the following summary of its budgeted cash flows:

	1 st quarter	2 nd quarter	3 rd quarter	4 th quarter
Total cash budget	180,000	330,000	210,000	230,000
Total cash disbursement	260,000	230,000	220,000	240,000

The company's beginning cash balance for the upcoming fiscal year will be \$20,000. The company requires a minimum cash balance of \$10,000 and may borrow any amount needed from a local bank at a quarterly interest rate of 3%. The company may borrow any amount at the beginning of any quarter and may repay its loans, or any part of its loans, at the end of any quarter. Interest payments are due on any principal at the time it is repaid. For simplicity, assume that interest is not compounded.

Required:

prepare the company's cash budget for the upcoming fiscal year

1	The disbursements section of a cash budget consists of all cash payments for the period except cash payments for dividends	FALSE
---	--	-------

1) Bries Corporation is preparing its cash budget for January. The budgeted beginning cash balance is \$18,000. Budgeted cash receipts total \$183,000 and budgeted cash disbursements total \$188,000. The desired ending cash balance is \$30,000.

The excess (deficiency) of cash available over disbursements for January is:

- A) 23,000
- B) \$13,000**
- C) (\$5,000)
- D) \$201,000

To attain its desired ending cash balance for January, the company should borrow:

- A) \$17,000**
- B) \$0
- C) \$30,000
- D) \$43,000

2) Jeanclaude Corporation produces and sells one product. The budgeted selling price per unit is \$105. Budgeted unit sales for July, August, September, and October are 7,400, 7,500, 13,800, and 15,300 units, respectively. All sales are on credit. Regarding credit sales, 40% are collected in the month of the sale and 60% in the following month.

The budgeted accounts receivable balance at the end of August is closest to:

- A) \$525,000
- B) \$315,000
- C) \$472,500**
- D) \$787,500

18

PROBLEM 8-28 (Cash Budget with Supporting Schedules)

Westex Products is a wholesale distributor of industrial cleaning products. When the treasurer of Westex Products approached the company's bank late in the current year seeking short-term financing, he was told that money was very tight and that any borrowing over the next year would have to be supported by a detailed statement of cash collections and disbursements. The treasurer also was told that it would be very helpful to the bank if borrowers would indicate the quarters in which they would be needing funds, as well as the amounts that would be needed, and the quarters in which repayments could be made.

Because the treasurer is unsure as to the particular quarters in which bank financing will be needed, he has assembled the following information to assist in preparing a detailed cash Budgeted:

- a- budgeted sales and merchandise purchases for next year, as well as actual sales and purchases for the last quarter of the current year, are:

	sales	Merchandise purchases
Current year		
Fourth quarter actual	\$ 200,000	\$ 126,000
Next year:		
First quarter estimated	\$ 300,000	\$ 186,000
Second quarter estimated	\$ 400,000	\$ 246,000
Third quarter estimated	\$ 500,000	\$ 305,000
Fourth quarter estimated	\$ 200,000	\$ 126,000

- b- All sales are on account. The company normally collects 65% of a quarter's sales before the quarter ends and another 33% in the following quarter. The remainder is uncollectible. This pattern of collections is now being experienced in the current year's fourth-quarter actual data.
- c- Eighty percent of a quarter's merchandise purchases are paid for within the quarter. The remainder is paid for in the following quarter.
- d- Selling and administrative expenses for next year are budgeted at \$50,000 per quarter plus 15% of sales. Of the fixed amount, \$20,000 each quarter is depreciation.
- e- The company will pay \$10,000 in dividends each quarter
- f- Land purchases of \$75,000 will be made in the second quarter, and purchases of \$48,000 will be made in the third quarter. These purchases will be for cash.
- g- The Cash account contained \$10,000 at the end of the current year. The treasurer feels that this represents a minimum balance that must be maintained.
- h- The company's bank allows borrowing in increments of \$1,000 at the beginning of each quarter, up to a total loan balance of \$100,000. The interest rate on these loans is 2.5% per quarter and for simplicity we will assume that interest is not compounded. The company would, as far as it is able, repay the loan plus accumulated interest at the end of the year.
- i- At present, the company has no loans outstanding

Required:

- 1- Calculate the expected cash collections by quarter and in total for next year
- 2- Calculate the expected cash disbursements for merchandise purchases by quarter and in total for next year.
- 3- Calculate the expected cash disbursements for selling and administrative expenses, by quarter and in total for next year.
- 4- Prepare a cash budget by quarter and in total for next year.

1) Michard Corporation makes one product and it provided the following information to help prepare the master budget for the next four months of operations:

- a. The budgeted selling price per unit is \$125. Budgeted unit sales for April, May, June, and July are 7,600, 10,500, 13,800, and 12,900 units, respectively. All sales are on credit.
- b. Regarding credit sales, 20% are collected in the month of the sale and 80% in the following month.
- c. The ending finished goods inventory equals 20% of the following month's sales.
- d. The ending raw materials inventory equals 30% of the following month's raw materials production needs. Each unit of finished goods requires 4 pounds of raw materials. The raw materials cost \$2.00 per pound.
- e. Regarding raw materials purchases, 30% are paid for in the month of purchase and 70% in the following month.
- f. The direct labor wage rate is \$25.00 per hour. Each unit of finished goods requires 3.0 direct labor-hours.
- g. The variable selling and administrative expense per unit sold is \$3.40. The fixed selling and administrative expense per month is \$80,000.

The budgeted sales for May is closest to:

- A) \$1,725,000
- B) \$950,000
- C) **\$1,312,500**
- D) \$1,612,500

The expected cash collections for May is closest to:

- A) \$262,500
- B) **\$1,022,500**
- C) \$760,000
- D) \$950,000

The budgeted required production for May is closest to:

- A) **11,160 units**
- B) 13,260 units
- C) 15,360 units
- D) 10,500 units

If 54,480 pounds of raw materials are required for production in June, then the budgeted raw material purchases for May is closest to:

- A) 74,376 pounds
- B) 44,640 pounds
- C) **47,592 pounds**
- D) 60,984 pounds

If 54,480 pounds of raw materials are required for production in June, then the budgeted cost of raw material purchases for May is closest to:

- A) \$148,752
- B) \$89,280
- C) \$121,968
- D) **\$95,184**

The estimated direct labor cost for May is closest to:

- A) \$558,000
- B) \$33,480
- C) \$837,000**
- D) \$279,000

The estimated selling and administrative expense for May is closest to:

- A) \$115,700**
- B) \$80,000
- C) \$77,130
- D) \$35,700

2) Sevenbergen Corporation makes one product and has provided the following information to help prepare the master budget for the next four months of operations:

Budgeted selling price per unit	\$ 92
Budgeted unit sales (all on credit):	
July	9,000
August	11,300
September	10,400
October	10,800

Raw materials requirement per unit of output	4 pounds
Raw materials cost	\$ 1.00 per pound
Direct labor requirement per unit of output	2.8 direct labor-hours
Direct labor wage rate	\$ 22.00 per direct labor-hour
Variable selling and administrative expense	\$ 1.50 per unit sold
Fixed selling and administrative expense	\$ 70,000 per month

Credit sales are collected:

- 40% in the month of the sale
- 60% in the following month

Raw materials purchases are paid:

- 30% in the month of purchase
- 70% in the following month

The ending finished goods inventory should equal 20% of the following month's sales. The ending raw materials inventory should equal 30% of the following month's raw materials production needs.

The budgeted sales for August is closest to:

- A) \$956,800
- B) \$1,039,600**
- C) \$993,600
- D) \$828,000

The expected cash collections for August is closest to:

- A) \$912,640**
- B) \$415,840
- C) \$496,800
- D) \$828,000

The budgeted required production for August is closest to:

- A) 15,640 units
- B) 13,380 units
- C) 11,300 units
- D) 11,120 units**

If 41,920 pounds of raw materials are required for production in September, then the budgeted raw material purchases for August is closest to:

- A) 57,056 pounds
- B) 44,480 pounds
- C) 43,712 pounds**
- D) 70,400 pounds

If 41,920 pounds of raw materials are required for production in September, then the budgeted cost of raw material purchases for August is closest to:

- A) \$57,056
- B) \$43,712**
- C) \$44,480
- D) \$70,400

The estimated direct labor cost for August is closest to:

- A) \$465,000
- B) \$684,992**
- C) \$31,136
- D) \$244,640

The estimated selling and administrative expense for August is closest to:

- A) \$70,000
- B) \$57,970
- C) \$16,950
- D) \$86,950**

19

The budgeted income statement

Hampton Freeze, Inc. Budgeted income statement For the year ended December 31, 2017	
Sales	2,000,000
COGS	1,300,000
Gross margin	700,000
Selling and administrative expenses	576,000
Net operating income	124,000
Interest expense	21,900
Net income	102,100

The budgeted balance sheet

Hampton Freeze, Inc. Budgeted balance sheet For the year ended December 31, 2017	
<u>Assets</u>	
<u>Current assets:</u>	
Cash	41,400
Account receivable	120,000
Raw material inventory	4,500
Finished goods inventory	39,000
Total current assets	204,900
<u>Property Plant and equipment:</u>	
Land	80,000
Building and equipment	830,000
Accumulated depreciation	(392,000)
Plant and equipment, net	518,000
Total assets	722,900
<u>Liabilities and stock holder's: equity</u>	
<u>Current liabilities:</u>	
Account payable (raw materials)	27,900
<u>Stockholder's equity</u>	
Common stock, no par	175,000
Retained earnings	520,000
Total stockholder's equity	695,000
Total liabilities and stockholder's equity	722,900

20

EXERCISE 8-8 (Budgeted Income Statement)

Gig Harbor Boating is the wholesale distributor of a small recreational catamaran sailboat. Management has prepared the following summary data to use in its annual budgeting process.

Budgeted unit sales	460
Selling price per unit	\$ 1,950
Cost per unit	\$ 1,575
Variable selling and administrative expense (per unit)	\$ 75
Fixed selling and administrative expense (per year)	\$ 105,000
Interest expense for the year	\$ 14,000

Required:

prepare the company's budgeted income statement for the year.

1) Murie Corporation makes one product and has provided the following information:

Budgeted selling price per unit	\$	98 per unit sold
Budgeted unit sales, February		11,000 Units
Raw materials requirement per unit of output		5 Pounds
Raw materials cost	\$	3.00 per pound
Direct labor requirement per unit of output		2.5 direct labor-hours
Direct labor wage rate	\$	18.00 per direct labor-hour
Predetermined overhead rate (all variable)	\$	11.00 per direct labor-hour
Variable selling and administrative expense	\$	2.70 per unit sold
Fixed selling and administrative expense	\$	80,000 per month

The estimated net operating income (loss) for February is closest to:

- A) **\$5,800**
- B) \$42,000
- C) \$35,500
- D) \$85,800

2) Wasilko Corporation produces and sells one product

- a. The budgeted selling price per unit is \$114. Budgeted unit sales for February is 9,900 units.
- b. Each unit of finished goods requires 6 pounds of raw materials. The raw materials cost \$4.00 per pound.
- c. The direct labor wage rate is \$24.00 per hour. Each unit of finished goods requires 2.4 direct labor-hours.
- d. Manufacturing overhead is entirely variable and is \$9.00 per direct labor-hour.
- e. The variable selling and administrative expense per unit sold is \$1.60. The fixed selling and administrative expense per month is \$70,000.

The estimated net operating income (loss) for February is closest to:

- A) \$50,000
- B) \$91,080
- C) **\$21,080**
- D) \$36,920

3) Raimondo Corporation makes one product and has provided the following information:

- a. The budgeted selling price per unit is \$89. Budgeted unit sales for August is 8,300 units.
- b. Each unit of finished goods requires 4 pounds of raw materials. The raw materials cost \$2.00 per pound.
- c. The direct labor wage rate is \$21.00 per hour. Each unit of finished goods requires 2.6 direct labor-hours.
- d. Manufacturing overhead is entirely variable and is \$7.00 per direct labor-hour.

The estimated cost of goods sold for August is closest to:

- A) \$519,580
- B) \$577,680
- C) **\$670,640**
- D) \$151,060

4) Dilly Farm Supply is located in a small town in the rural west. Data regarding the store's operations follow:

- Sales are budgeted at \$290,000 for November, \$310,000 for December, and \$210,000 for January.
- Collections are expected to be 65% in the month of sale and 35% in the month following the sale.
- The cost of goods sold is 80% of sales.
- The company desires to have an ending merchandise inventory at the end of each month equal to 70% of the next month's cost of goods sold. Payment for merchandise is made in the month following the purchase.
- Other monthly expenses to be paid in cash are \$21,100.
- Monthly depreciation is \$21,000.
- Ignore taxes.

Balance Sheet
October 31

Assets	
Cash	\$ 25,000
Accounts receivable	77,000
Merchandise inventory	162,400
Property, plant and equipment, net of \$624,000 accumulated depreciation	1,026,000
Total assets	\$ 1,290,400
 Liabilities and Stockholders' Equity	
Accounts payable	\$ 239,000
Common stock	740,000
Retained earnings	311,400
Total liabilities and stockholders' equity	\$ 1,290,400

Expected cash collections in December are:

- A) \$310,000
- B) \$101,500
- C) \$303,000**
- D) \$201,500

The cost of December merchandise purchases would be:

- A) \$248,000
- B) \$232,000
- C) \$117,600
- D) \$192,000**

December cash disbursements for merchandise purchases would be:

- A) \$192,000
- B) \$243,200**
- C) \$117,600
- D) \$248,000

The difference between cash receipts and cash disbursements for December would be:

- A) \$46,600
- B) \$19,200
- C) \$13,700
- D) \$38,700**

The net income for December would be:

- A) **\$19,900**
- B) \$38,700
- C) \$40,900
- D) \$13,700

5) Knappert Corporation makes one product and has provided the following information:

- a. Each unit of finished goods requires 3 pounds of raw materials. The raw materials cost \$5.00 per pound.
- b. The direct labor wage rate is \$24.00 per hour. Each unit of finished goods requires 2.8 direct labor-hours.
- c. Manufacturing overhead is entirely variable and is \$11.00 per direct labor-hour.
- d. The variable selling and administrative expense per unit sold is \$3.80. The fixed selling and administrative expense per month is \$50,000.

The unit product cost is closest to:

- A) \$82.20
- B) \$93.20
- C) \$30.80
- D) **\$113.00**

6) Um Corporation has provided the following information concerning its raw materials purchases. The budgeted cost of raw materials purchases in November is \$286,032. The company pays for 40% of its raw materials purchases in the month of purchase and 60% in the following month. The budgeted accounts payable balance at the end of November is closest to:

- A) \$114,413
- B) \$140,333
- C) **\$171,619**
- D) \$286,032

6) Crocetti Corporation makes one product and has provided the following information to help prepare the master budget for the next four months of operations:

Budgeted selling price per unit	\$	121
Budgeted unit sales (all on credit):		
January		7,000
February		7,500
March		11,900
April		14,900

Credit sales are collected:

- 40% in the month of the sale
- 60% in the following month

The budgeted accounts receivable balance at the end of February is closest to:

- A) **\$544,500**
- B) \$907,500
- C) \$605,000
- D) \$363,000

7) The Bandeiras Corporation, a merchandising firm, has budgeted its activity for December according to the following information:

- Sales at \$550,000, all for cash.
- Merchandise inventory on November 30 was \$300,000.
- The cash balance at December 1 was \$25,000.
- Selling and administrative expenses are budgeted at \$60,000 for December and are paid in cash.
- Budgeted depreciation for December is \$35,000.
- The planned merchandise inventory on December 31 is \$270,000.
- The cost of goods sold is 75% of the sales price.
- All purchases are paid for in cash.
- There is no interest expense or income tax expense.

The budgeted cash receipts for December are:

- A) \$412,500
- B) \$137,500
- C) \$585,000
- D) \$550,000**

The budgeted cash disbursements for December are:

- A) \$382,500
- B) \$442,500**
- C) \$472,500
- D) \$477,500

The budgeted net income for December is:

- A) \$107,500
- B) \$137,500
- C) \$42,500**
- D) \$77,500

8) Kesselring Corporation makes one product and has provided the following information to help prepare the master budget for the next three months of operations:

Budgeted unit sales (all on credit):

July	8,400
August	8,800
September	12,200

Raw materials requirement per unit of output	4 Pounds
Raw materials cost	\$ 3.00 per pound
Direct labor requirement per unit of output	2.8 direct labor-hours
Direct labor wage rate	\$ 18.00 per direct labor-hour
Predetermined overhead rate (all variable)	\$ 11.00 per direct labor-hour

The ending finished goods inventory should equal 40% of the following month's sales. The budgeted finished goods inventory balance at the end of August is closest to:

- A) \$358,192
- B) \$150,304
- C) \$304,512
- D) \$454,816**

9) Darke Corporation makes one product and has provided the following information:

- Budgeted unit sales for October, November, and December are 7,600, 9,000, and 10,100 units respectively.
- The ending finished goods inventory equals 40% of the following month's sales.
- Each unit of finished goods requires 5 pounds of raw materials. The raw materials cost \$1.00 per pound.
- The direct labor wage rate is \$19.00 per hour. Each unit of finished goods requires 3.0 direct labor-hours.
- Manufacturing overhead is entirely variable and is \$11.00 per direct labor-hour.

The estimated finished goods inventory balance at the end of November is closest to:

- \$294,920
- \$383,800**
- \$133,320
- \$250,480

10) Stefanovich Corporation makes one product. The company has provided the following information concerning its raw materials needs:

- The ending raw materials inventory should equal 20% of the following month's raw materials production needs.
- Each unit of finished goods requires 2 pounds of raw materials.
- The raw materials cost \$3.00 per pound.
- The company will need 26,440 pounds of raw material to satisfy production needs in March.

The raw materials inventory balance at the end of February should be closest to:

- \$74,136
- \$14,568
- \$88,704
- \$15,864**

11) Harri Corporation has budgeted for the following sales:

July	\$	445,000
August	\$	580,000
September	\$	615,000
October	\$	890,000
November	\$	730,000
December	\$	690,000

Sales are collected as follows: 10% in the month of sale; 60% in the month following the sale; and the remaining 30% in the second month following the sale. In Razz's budgeted balance sheet at December 31, at what amount will accounts receivable be shown?

- \$690,000
- \$219,000
- \$621,000
- \$840,000**

12) The LaGrange Corporation had the following budgeted sales for the first half of the current year:

	Cash Sales	Credit Sales
January	\$ 70,000	\$ 340,000
February	\$ 50,000	\$ 190,000
March	\$ 40,000	\$ 135,000
April	\$ 35,000	\$ 120,000
May	\$ 45,000	\$ 160,000
June	\$ 40,000	\$ 140,000

The company is in the process of preparing a cash budget and must determine the expected cash collections by month. To this end, the following information has been assembled:

Collections on sales:

60% in month of sale

30% in month following sale

10% in second month following sale

The accounts receivable balance on January 1 of the current year was \$70,000, of which \$50,000 represents uncollected December sales and \$20,000 represents uncollected November sales.

The total cash collected during January by LaGrange Corporation would be:

- A) \$410,000
- B) \$254,000
- C) \$344,000
- D) \$331,500**

The cash balance at the end of December would be:

- A) \$69,100**
- B) \$25,000
- C) \$57,900
- D) \$38,300

Accounts payable at the end of December would be:

- A) \$192,000**
- B) \$248,000
- C) \$117,600
- D) \$74,400

Retained earnings at the end of December would be:

- A) \$325,100
- B) \$311,400
- C) \$353,400
- D) \$347,200**

13) Luchini Corporation makes one product and it provided the following information to help prepare the master budget for the next four months of operations:

- a. The budgeted selling price per unit is \$111. Budgeted unit sales for April, May, June, and July are 7,100, 10,100, 13,300, and 14,000 units, respectively. All sales are on credit.
- b. Regarding credit sales, 40% are collected in the month of the sale and 60% in the following month.
- c. The ending finished goods inventory equals 10% of the following month's sales.
- d. The ending raw materials inventory equals 30% of the following month's raw materials production needs. Each unit of finished goods requires 5 pounds of raw materials. The raw materials cost \$5.00 per pound.
- e. Regarding raw materials purchases, 40% are paid for in the month of purchase and 60% in the following month.
- f. The direct labor wage rate is \$18.00 per hour. Each unit of finished goods requires 2.9 direct labor-hours.
- g. Variable manufacturing overhead is \$7.00 per direct labor-hour. Fixed manufacturing overhead is zero.

The budgeted accounts receivable balance at the end of May is closest to:

- A) \$747,000
- B) \$448,440
- C) \$672,660**
- D) \$1,121,100

If 66,850 pounds of raw materials are required for production in June, then the budgeted raw material purchases for May is closest to:

- A) 52,100 pounds
- B) 72,155 pounds
- C) 87,785 pounds
- D) 56,525 pounds**

If the budgeted cost of raw materials purchases in April is \$207,650 and in May is \$282,625, then in May the total budgeted cash disbursements for raw materials purchases is closest to:

- A) \$124,590
- B) \$237,640**
- C) \$169,575
- D) \$113,050

The estimated finished goods inventory balance at the end of May is closest to:

- A) \$102,676
- B) \$111,986
- C) \$26,999
- D) \$129,675**

14) Bonkowski Corporation makes one product and has provided the following information to help prepare the master budget for the next four months of operations:

Budgeted selling price per unit	\$	97
Budgeted unit sales (all on credit):		
January		10,000
February		12,000
March		13,300
April		15,200
Raw materials requirement per unit of output		4 pounds
Raw materials cost	\$	1.00 per pound
Direct labor requirement per unit of output		2.5 direct labor-hours
Direct labor wage rate	\$	23.00 per direct labor-hour
Predetermined overhead rate (all variable)	\$	9.00 per direct labor-hour
Variable selling and administrative expense	\$	3.10 per unit sold
Fixed selling and administrative expense	\$	70,000 per month

Credit sales are collected:

30% in the month of the sale

70% in the following month

Raw materials purchases are paid:

30% in the month of purchase

70% in the following month

The ending finished goods inventory should equal 30% of the following month's sales. The ending raw materials inventory should equal 10% of the following month's raw materials production needs.

The budgeted sales for February is closest to:

- A) \$1,474,400
- B) \$1,290,100
- C) \$1,164,000**
- D) \$970,000

The expected cash collections for February is closest to:

- A) \$970,000
- B) \$1,028,200**
- C) \$349,200
- D) \$679,000

The budgeted accounts receivable balance at the end of February is closest to:

- A) \$349,200
- B) \$814,800**
- C) \$776,000
- D) \$1,164,000

The budgeted required production for February is closest to:

- A) 12,390 units**
- B) 19,590 units
- C) 15,990
- D) 12,000 units

If the company estimates that it will need 55,480 pounds of raw material to satisfy production needs in March, then the raw materials inventory balance at the end of February should be closest to:

- A) \$55,108
- B) \$50,152
- C) \$4,956
- D) \$5,548**

If the budgeted cost of raw materials purchases in February is \$50,152, then the budgeted accounts payable balance at the end of February is closest to:

- A) \$19,971
- B) \$50,152
- C) \$15,046
- D) \$35,106**

The estimated direct labor cost for February is closest to:

- A) \$284,970
- B) \$712,425**
- C) \$499,000
- D) \$30,975

The estimated unit product cost is closest to:

- A) \$70.50
- B) \$22.50
- C) \$84.00**
- D) \$61.50

The estimated finished goods inventory balance at the end of February is closest to:

- A) \$335,160**
- B) \$245,385
- C) \$281,295
- D) \$89,775

The estimated cost of goods sold for February is closest to:

- A) \$846,000
- B) \$270,000
- C) \$738,000
- D) \$1,008,000**

The estimated selling and administrative expense for February is closest to:

- A) \$71,470
- B) \$37,200
- C) \$107,200**
- D) \$70,000

The estimated net operating income (loss) for February is closest to:

- A) \$85,000
- B) \$48,800**
- C) \$118,800
- D) \$86,000

15) Petri Corporation makes one product and it provided the following information to help prepare the master budget for the next four months of operations:

- a. The budgeted selling price per unit is \$110. Budgeted unit sales for January, February, March, and April are 7,500, 10,600, 12,000, and 11,700 units, respectively. All sales are on credit.
- b. Regarding credit sales, 30% are collected in the month of the sale and 70% in the following month.
- c. The ending finished goods inventory equals 30% of the following month's sales.
- d. The ending raw materials inventory equals 10% of the following month's raw materials production needs. Each unit of finished goods requires 5 pounds of raw materials. The raw materials cost \$4.00 per pound.
- e. Regarding raw materials purchases, 40% are paid for in the month of purchase and 60% in the following month.
- f. The direct labor wage rate is \$23.00 per hour. Each unit of finished goods requires 2.6 direct labor-hours.
- g. Manufacturing overhead is entirely variable and is \$8.00 per direct labor-hour.
- h. The variable selling and administrative expense per unit sold is \$1.70. The fixed selling and administrative expense per month is \$70,000.

The budgeted sales for February is closest to:

- A) \$825,000
- B) \$1,166,000**
- C) \$1,287,000
- D) \$1,320,000

The expected cash collections for February is closest to:

- A) \$577,500
- B) \$927,300**
- C) \$349,800
- D) \$825,000

The budgeted accounts receivable balance at the end of February is closest to:

- A) \$777,000
- B) \$1,166,000
- C) \$816,200**
- D) \$349,800

The budgeted required production for February is closest to:

- A) 11,020 units**
- B) 14,200 units
- C) 10,600 units
- D) 17,380 units

If the company estimates that it will need 59,550 pounds of raw material to satisfy production needs in March, then the raw materials inventory balance at the end of February should be closest to:

- A) \$23,820**
- B) \$222,180
- C) \$22,040
- D) \$244,220

If the budgeted cost of raw materials purchases in February is \$222,180, then the budgeted accounts payable balance at the end of February is closest to:

- A) \$222,180
- B) \$88,872
- C) \$117,912
- D) \$133,308**

The estimated direct labor cost for February is closest to:

- A) \$253,460
- B) \$456,000
- C) \$658,996**
- D) \$28,652

The estimated unit product cost is closest to:

- A) \$20.80
- B) \$87.80
- C) \$79.80
- D) \$100.60**

The estimated finished goods inventory balance at the end of February is closest to:

- A) \$74,880
- B) \$362,160**
- C) \$316,080
- D) \$287,280

The estimated cost of goods sold for February is closest to:

- A) \$1,066,360**
- B) \$220,480
- C) \$930,680
- D) \$845,880

The estimated selling and administrative expense for February is closest to:

- A) \$70,000
- B) \$58,680
- C) \$88,020**
- D) \$18,020

The estimated net operating income (loss) for February is closest to:

- A) \$11,620**
- B) \$81,620
- C) \$41,000
- D) \$29,640

16) Carver Lumber sells lumber and general building supplies to building contractors in a medium-sized town in Montana. Data regarding the store's operations follow:

- Sales are budgeted at \$350,000 for November, \$320,000 for December, and \$300,000 for January.
- Collections are expected to be 90% in the month of sale and 10% in the month following the sale.
- The cost of goods sold is 75% of sales.
- The company desires to have an ending merchandise inventory equal to 60% of the following month's cost of goods sold. Payment for merchandise is made in the month following the purchase.
- Other monthly expenses to be paid in cash are \$24,700.
- Monthly depreciation is \$16,000.
- Ignore taxes.

Balance Sheet
October 31

Assets	
Cash	\$ 19,000
Accounts receivable	77,000
Inventory	157,500
Property, plant and equipment, net of \$502,000 accumulated depreciation	1,002,000
Total assets	\$ 1,255,500
Liabilities and Stockholders' Equity	
Accounts payable	\$ 272,000
Common stock	780,000
Retained earnings	203,500
Total liabilities and stockholders' equity	\$ 1,255,500

The net income for December would be:

- A) **\$39,300**
- B) \$42,300
- C) \$32,900
- D) \$55,300

The cash balance at the end of December would be:

- A) \$19,000
- B) **\$163,600**
- C) \$61,300
- D) \$137,600

Accounts payable at the end of December would be:

- A) **\$231,000**
- B) \$96,000
- C) \$135,000
- D) \$240,000

Retained earnings at the end of December would be:

- A) \$289,600
- B) **\$296,000**
- C) \$236,400
- D) \$203,500

Direct Materials Budget

<p>Required production in units of finished goods</p> <p>*Units of raw materials needed per unit of FG</p> <p>=Units of raw materials needed to meet production</p> <p>Add: desired units of ending raw materials inventory</p> <p>=Total units of raw materials needed</p> <p>Less: units of beg raw materials inventory</p> <p>=Units of raw materials to be purchased</p> <p>*Unit cost of raw materials</p> <p>=Cost of raw materials to be purchased</p>	<p style="text-align: right;">شكتر نحتاج من المواد عشان ننتج حبة من المنتج</p> <p style="text-align: right;">ناخذ الكمية الي نحتاجها للفترة الياية و نضربها بالنسبة الي نبيها, ننتبه بالمجموع نحط بس لآخر فترة</p> <p style="text-align: right;">ناخذ للفترة الحالية و نضربها بالنسبة و ننتبه بالمجموع ناخذ لأول فترة بس</p>
---	--

Production Budget

<p>Budgeted unit sales</p> <p>+Desired units of ending finished goods</p> <p>=Total needs</p> <p>Less: units of beg finished goods</p> <p>=Required production in units</p>	<p style="text-align: right;">ناخذ الكمية الي نحتاجها من الفترة الياية * % , و بالمجموع فقط لآخر فترة</p> <p style="text-align: right;">الفترة الحالية * % , للمجموع ناخذ فقط لأول فترة</p>
---	---

Direct labor Budget "Adjusted"

<p>Required production in units</p> <p>*Direct labor hour per unit</p> <p>=Total direct labor hours needed</p> <p>*Direct labor cost per</p> <p>=Total direct labor cost</p>	
--	--

Direct labor Budget "Adjusted"

Required production in units	
*Direct labor hour per unit	
=Total direct labor hours needed	
Regular hours paid	ساعات العمل العادية
Overtime hours paid	total DL H – regular hours = ساعات العمل الزائدة لو بيتشغلون أقل من الساعات العادية ما نحط شي
Wages for regular hours	ساعات العمل العادية * سعر الساعة
Wages for overtime	الساعات الزائدة * سعر الاوفر تايم
Total direct labor cost	

Manufacturing overhead Budget

Budgeted direct labor hours	
*Variable manufacturing overhead rate	
=Variable manufacturing overhead	
+Fixed manufacturing overhead	
=Total manufacturing overhead	
Less: depreciation expense	
=Cash disbursements for MOH	
$\text{Predetermined MOH rate} = \frac{\text{T.MOH}}{\text{T. DL hours}}$	

Selling and Administrative expense Budget

Budgeted unit sales	
*Variable selling and administrative expense rate	
=variable selling and administrative expense	
+Fixed selling and administrative expense	
=total selling and administrative expense	
Less: depreciation expense	
=cash disbursements for selling and administrative expense	

Cash Budget

Beginning cash balance	نحط فقط لأول فترة , و الفترات الي عقب ناخذ ال ending للفترة الي قبلها
+ Total cash receipts	
= Total cash available	
-Cash disbursements	مرات ما يكون معطينا ياه كمجموع فنحسب كل شي Purchases, dividends, land.. etc.
= excess (deficiency) of cash available over disbursements	
Financing:	
Borrowings	نقترض اذا عندنا قصور بالكاش, حتى لو ما عندنا قصور نشوف اذا الي عندنا أقل من الي مفروض يكون عندنا هم نقترض
Repayments	نرجع لمن يكون عندنا فلوس
Interest	المبلغ الي اقترضناه * % * جم فترة تم ويانا
Total financing	
Ending cash balance	ناخذه و يكون beg للفترة الياية
مرات بقولنا الاقتراض مفروض يكون مضاعفات ال 1000 , فاذا نحتاج مثلاً 35,500 راح نقترض 36,000	

THE END
Good luck