Hayes believes it can meet future sales requirements by maintaining an ending inventory equal to 20% of the next quarter's budgeted sales volume. The production budget is shown below

**a. Sales budget**
The first budget prepared.
Each of the other budgets depends on the sales budget.
It is derived from the sales forecast. It represents management's best estimate of sales revenue for the budget period.

The sales budget is prepared by multiplying the expected unit sales volume for each product by its anticipated unit selling price.

For Hayes Company, sales volume is expected to be 3,000 units in the first quarter with 500-unit increments in each succeeding year. Based on a sales price of $60 per unit, the sales budget for the year by quarters is shown below:

**Sales Budget**
**For the year ending 31, 20XX**

| Period | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Expected sales units | | | | |
| Selling price | | | | |
| Total sales | | | | |

**b. Production Budget**

**Production Budget**
**For the year ending 31, 20XX**

| Period | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Expected sales units | | | | |
| + Closing stock | | | | |
| -Opening stock | | | | |
| Total Production unit | | | | |
| | | | | |

**c. Direct Materials Budget**

- Shows both the quantity and cost of direct materials to be purchased.
- It is derived from the direct materials units required for production (per production budget) plus the desired ending direct materials units less the beginning direct materials units.
- Hayes has found that an ending inventory of raw materials equal to 10% of the next quarter's production is sufficient. The manufacture of Kitchen-mate requires 2 pounds of raw materials and the expected cost per pound is $4. Assume ending direct materials for the 4th quarter are 1,020 pounds. The direct materials budget is shown below:

**Direct Material budget**
**For the year ending 31, 20XX**

| Period | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Production unit | | | | |
| X D. Materials needed | | | | |
| Total material needed for production | | | | |
| + Opening Inventory | | | | |
| -Closing Inventory | | | | |

**d. Direct Labor Budget**

At Hayes Company, two hours of direct labor are required to produce each unit of finished goods, and the anticipated hourly wage rate is $10. The direct labor budget is shown below.

**Direct Labour budget**
**For the year ending 31, 20XX**

| Period | 1 | 2 | 3 | 4 |
|---|---|---|---|---|

| Production units | | | | |
|---|---|---|---|---|
| X D. Labour hr per unit | | | | |
| Total D. labour hr | | | | |
| D. labour cost | | | | |
| | | | | |

**d. Manufacturing Overhead and Selling and Administrative Budget**

- Manufacturing overhead budget
  expected manufacturing overhead costs
- Selling and administrative expense budget
  projection of anticipated operating expenses
- Both distinguish between fixed and variable costs.

Hayes Company expects variable costs to fluctuate with production volume on the basis of the following rates per direct labor hour (as calculated in the Direct Labor Budget).

Indirect materials $1.00/hr    Indirect labor $1.40/hr
Utilities $.40/hr    Maintenance $ .20/hr

**Variable Manufacturing Overhead**
**For the year ending 31, 20XX**

| Period | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Variable MO | | | | |
| Indirect Materials | | | | |
| Indirect Labour | | | | |
| Utilities | | | | |
| Maintenance | | | | |

Fixed costs complete the manufacturing overhead budget and the totals are used to calculate an overhead rate, which will be applied to production on the basis of direct labor hours.

**Fixed Manufacturing Overhead**
**For the year ending 31, 20XX**

| Period | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Fixed MO | | | | |
| Supervisor salaries | | | | |

| | | | | |
|---|---|---|---|---|
| Depreciation | | | | |
| Property tax & Insurance | | | | |
| Maintenance | | | | |

**e. Selling and Administrative Expense Budget**

Variable expenses are based on the unit sales projected in the sales budget. The rates per unit of sales are sales commissions $3.00 and freight-out $1.00. Fixed costs are based on assumed data and
include $1,000 of depreciation per quarter.

**Selling And administration Expenses Budget**
**For year ending December, 31 XXX**

| Period | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Sales Commissions | | | | |
| Freight Out | | | | |
| Total Variable | | | | |
| | | | | |
| Fixed Expenses | | | | |