

Plug Transactions:

Open. Bal. Net Inventories 1,000
+ Total Purchases 2,000
- Cost of Sales (2,500) "Plug"
= Closing Bal. Net Inventories 500

Open. Bal. Allowance Bad Debt 4,000
+ Bad Debt Expense 4,000
- Bad Debts Written-Off (3,000) "Plug"
= Closing Bal. Allow. Bad Debt 5,000

Open. Bal. Retained Earnings
+ Net Income
- Dividend Declared
= Closing Bal. Ret. Earn.

Open. Bal. Gross Acct. Rec.
+ Sales on Credit
- Cash Collection from Customers
- Bad Debts Written-Off
= Closing Bal. Gross A/R

Open. Bal. Net Acct. Rec.
+ Sales on Credit
- Bad Debt Expense
- Cash Collection from Customers
= Closing Bal. Net A/R

Open. Bal. Net Finished Goods Inventories
+ Transfer from Work-in-Progress Inventories
- Cost of Sales
= Closing Bal. Net Finished Goods Inventories

Open. Bal. Net Work-in-Progress Inventories
+ Additions to WIP Inventories
- Transfer to Finished Goods Inventories
= Closing Bal. Net Work-in-Progress Inventories

Open. Bal. Net Raw Material Inventories
+ New Purchase
- Transfer to WIP Inventories
= Closing Bal. Raw Material Inventories

Open. Bal. Deferred Revenues
+ Cash Received in Advance from customers
- Revenues recognized
= Closing Bal. Deferred Revenues

Transaction that reduces Income but does not reduce Cash Flow: ↓ Inventory; ↑ Inventory Impairment Loss [OR] ↑ Allow. For Inventory Impairment; ↑ Inventory Impairment Loss

Issuing Bonds: Pricing: add up 2 PV's; 1-PV(Face Value) at maturity; 2- PV(Annuity of Coupon Payments)

Issued at Par (Price=Face Value, when $r = \text{mkt int. rate}$); *at Discount* ($P < FV$, when $r < m$); *at Premium* ($P > FV$, when $r > m$)

Accounting Entries for Bonds: e.g. bond issued at premium: ↑ Cash; ↓ Bond Payable

For making period payments: $\text{CPN PMT} = FV * \text{CPN Rate}$ | Interest Expense = Book Value * Market Interest Rate

[Coupon PMT = "Cash PMT"] $\text{CPN} > \text{Interest}$: ↓ Cash by amount of CPN PMT, ↑ Interest Expense; ↑ Bond Payable by difference btwn CPN and Interest PMT

$\text{CPN} < \text{Interest}$: Cash ↓ by CPN amount; Interest Expense ↑; Bond Payable ↓ $\text{CPN} = \text{Interest}$: Cash ↓, ↑ Interest Expense, NO change in Bond Payable

Variance Analysis:

Price Variance = $AQ(AP) - AQ(SP)$

Quantity Variance = $SP(AQ) - SP(SQ)$ [For Material Price Variance use AQ PURCHASED; MQV use AQ USED]

Labor Rate Variance = Actual Hrs(Actual Rate - Std. Rate)

Labor Efficiency Variance = Std. Rate(Actual Hrs. - Std. Hrs.) ****Std. Material & Labor costs = part of WIP inventory**

Profit = price * Volume - Cost (where cost = $FC + \text{unit VC} * \text{Volume}$)

Contribution Margin = Sales (Revenue) - VC

CM Ratio = $\text{Total CM} / \text{Tot. Sales}$ [or] = unit CM/Sale Price

Income Statement: Sales - Variable Expenses = Contribution Margin - Fixed Expenses = Net Operating Income (Net Income)

Calc. Break-Even Point: Sales = VC + FC + Profits $\Rightarrow \text{Sale Price} * (Q) = \text{VC/unit} * (Q) + \text{Tot. FC}$ solve for Q

Operating Leverage: degree of operating leverage = CM / Net Income

POHR = Est. Tot. Mfg. OH / Est. Tot. units in Allocation Base

OH Applied = POHR * Actual Activity

Actual OH < Applied: overapplied OH; **Actual OH > Applied:** underapplied OH

Calc. POHR for different cost drivers: Machine Hrs = Budgeted MFG. OH / Budgeted Machine Hrs Direct Labor Dollars = Budgeted MFG. OH / (Budgeted D-L Rate * Budgeted D-L Hrs.)

Calc. amt. over/under applied: 1- compute actual OH Rate = Actual Mfg. OH / Actual Hrs. [or] if D-L, Actual Mfg. OH / Budgeted D-L Cost = Budgeted Hrs * Budgeted Rate)

2- Compare #1 to budgeted rate (budgeted < actual = under) 3- compute amount over/under applied = Actual Mfg. OH - (Actual Hrs. * Budgeted Rate) [OR] Actual D-L Cost * Budgeted DL Rate

Return on Investment (ROI) = investment center income / investment center asset base [OR] = Investment Turnover * Return-on-sales $\Rightarrow (\text{Sales/Asset Base}) * (\text{Invest center Income / Sales})$

Residual Income = Division income - (Minimum rate of return * (Assets - Current liabilities))

Economic Value Added (EVA) = after-tax division income - [Cost of capital * (Assets - current liab.)]