



Preparing an Expanded Income Statement

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WHAT'S COVERED

This tutorial will cover how to prepare an expanded income statement.

Our discussion breaks down as follows:

1. [Expanded Income Statement: A Review](#)
2. [Expanded Sales Calculation](#)
3. [Expanded Cost of Goods Sold Calculation](#)
4. [Calculating Cost of Goods Sold: Example](#)

1. Expanded Income Statement: A Review

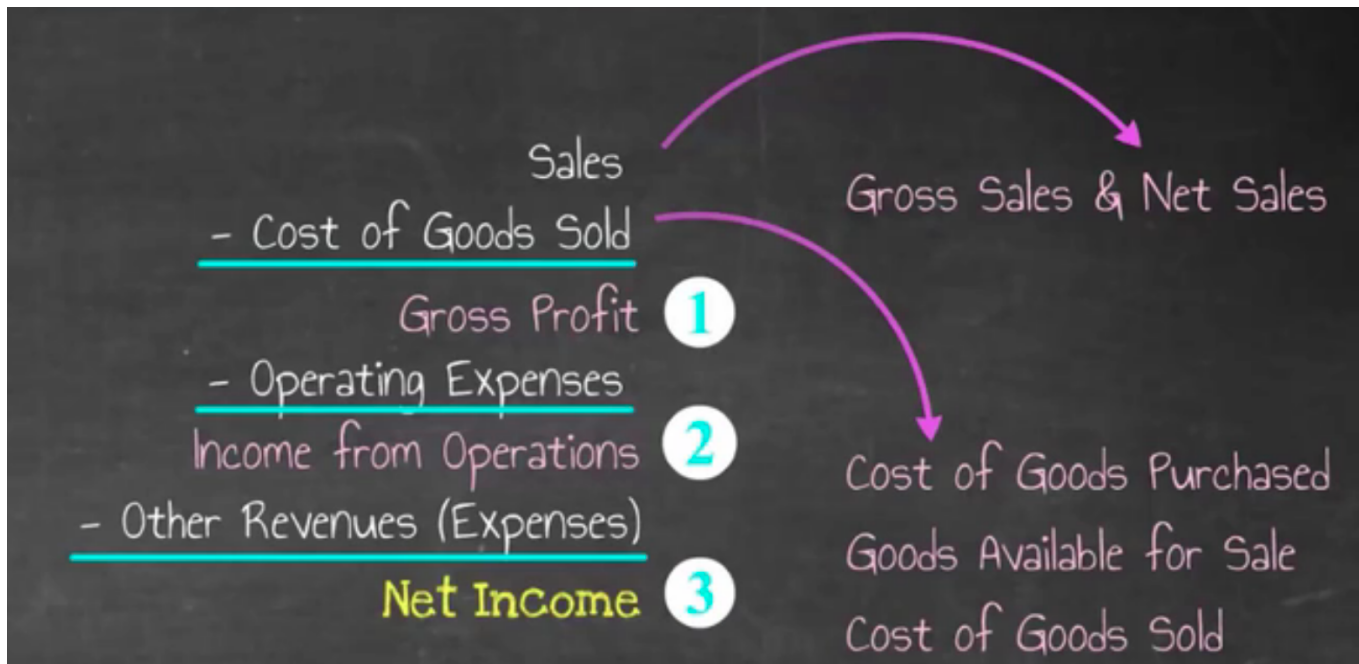
In review, the expanded income statement starts with sales minus cost of goods sold equals gross profit. We then subtract out operating expenses to arrive at income from operations. Finally, we add other revenues or subtract other expenses to equal net income.

The image shows a handwritten income statement on a chalkboard. It is organized into three numbered steps, each with a teal circle containing a number to its right. Step 1: 'Sales' is written at the top, followed by '- Cost of Goods Sold' which is underlined with a teal line. Step 2: 'Gross Profit' is written in pink, followed by '- Operating Expenses' which is underlined with a teal line. Step 3: 'Income from Operations' is written in pink, followed by '- Other Revenues (Expenses)' which is underlined with a teal line. Finally, 'Net Income' is written in yellow at the bottom.

$$\begin{array}{r} \text{Sales} \\ - \text{Cost of Goods Sold} \\ \hline \text{Gross Profit} \\ - \text{Operating Expenses} \\ \hline \text{Income from Operations} \\ - \text{Other Revenues (Expenses)} \\ \hline \text{Net Income} \end{array}$$

We can further break down the expanded income statement by taking the sales piece and looking at gross sales and net sales, separately calculating net sales.

We can also break down the cost of goods sold piece. Cost of goods sold is a component of cost of goods purchased, which is going to give us goods available for sale. Then, we can calculate the cost of goods sold figure. Therefore, the whole process is made up of a few different calculations.

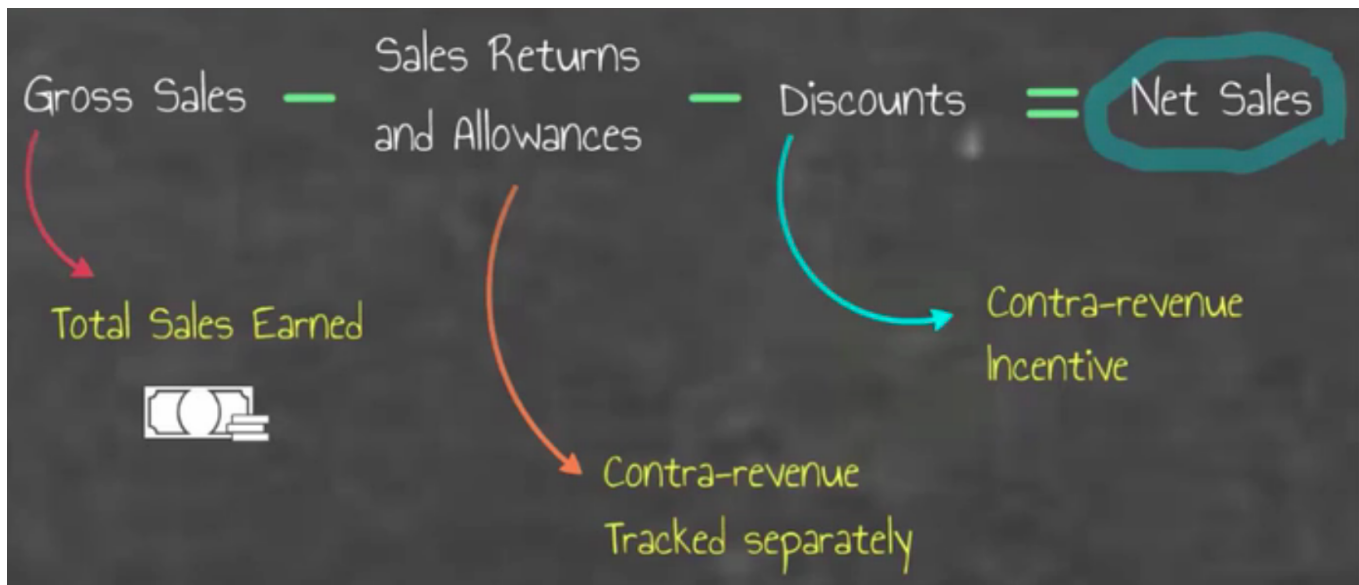


2. Expanded Sales Calculation

Now we're going to break down our sales, looking at gross sales and calculating our net sales, through the expanded sales calculation.

Starting with gross sales, we subtract out sales returns and allowances, and subtract out discounts, to equal net sales.

- Gross sales are the total sales earned--total cash and total credit sales.
- Sales returns and allowances is a contra-revenue account, meaning it reduces sales. It is tracked separately from sales to preserve our analysis capabilities, so we can compare our sales returns and allowances to our total sales to see what percentage they are, and perform additional analysis.
- Discounts is also a contra-revenue account, meaning it reduces our sales. It's an incentive which can be offered to improve prompt payment or improve total sales. It is also tracked separately.



Again, the expanded sales calculation is gross sales minus sales return and allowances, minus discounts, equals net sales.



FORMULA TO KNOW

Expanded Sales Calculation

$$\text{Gross Sales} - \text{Sales Returns and Allowances} - \text{Discounts} = \text{Net Sales}$$

3. Expanded Cost of Goods Sold Calculation

We can also expand the cost of goods sold calculation. Starting with our beginning inventory, we add cost of goods purchased to give us the goods available for sale. From there, we subtract out ending inventory to provide the cost of goods sold.

$$\begin{array}{r}
 \text{Beginning Inventory} \\
 + \text{Cost of Goods Purchased} \\
 \hline
 \text{Goods Available for Sale} \\
 - \text{Ending Inventory} \\
 \hline
 \text{Cost of Goods Sold}
 \end{array}$$

However, we can go even further by breaking down the cost of goods purchased piece of the calculation, starting with purchases, minus discounts, minus purchase returns and allowances to equal net purchases. Next, we would add freight-in, which is the shipping cost to bring the inventory to us, to give us the total cost of goods purchased. This is how we calculate cost of goods purchased, which we can now plug into the cost of goods sold calculation.

The diagram illustrates the calculation of Cost of Goods Purchased by breaking down the 'Cost of Goods Purchased' term from the first equation. A pink arrow points from 'Cost of Goods Purchased' in the first equation to the 'Purchases' line item in the second equation. A green arrow points from the explanatory text to the 'Purchases' line item.

$$\begin{array}{r}
 \text{Beginning Inventory} \\
 + \text{Cost of Goods Purchased} \\
 \hline
 \text{Goods Available for Sale} \\
 - \text{Ending Inventory} \\
 \hline
 \text{Cost of Goods Sold}
 \end{array}
 \qquad
 \begin{array}{r}
 \text{The buying of inventory for resale to customers, or assets} \\
 \text{such as supplies or equipment, for cash or credit} \\
 \text{Purchases} \\
 - \text{Discounts} \\
 - \text{Purchase Returns and Allowances} \\
 \hline
 \text{Net Purchases} \\
 + \text{Freight-in} \\
 \hline
 \text{Cost of Goods Purchased}
 \end{array}$$

4. Calculating Cost of Goods Sold: Example


Now that we have discussed the formulas and calculations involved, let's look at an example of calculating cost of goods sold, as well as cost of goods purchased.

Cost of Goods Sold Calculation	
Beginning Inventory	\$500,000
+ Cost of Goods Purchased	
= Goods Available for Sale	
- Ending Inventory	
= Cost of Goods Sold	

As you can see, we start at the top with beginning inventory, \$500,000, which we would pull from our accounting information.

To this beginning inventory, we add cost of goods purchased. Well, how do we figure out cost of goods purchased? We have to go down to the cost of goods purchased calculation.

Cost of Goods Sold Calculation	
Beginning Inventory	\$500,000
+ Cost of Goods Purchased	\$181,000
= Goods Available for Sale	
- Ending Inventory	
= Cost of Goods Sold	
Cost of Goods Purchased Calculation	
Purchases	\$200,000
- Purchase Returns and Allowance	(\$10,000)
- Purchase Discounts	(\$10,000)
= Net Purchases	\$180,000
+ Freight In	\$1,000
= Cost of Goods Purchased	\$181,000



Starting with our purchases, we subtract out purchase returns and allowances, and subtract out purchase discounts, which provides us with net purchases. Then, once we have our net purchases, we add freight-in, or those shipping costs that we incurred getting the merchandise to us, to give us the total cost of goods purchased, \$181,000.

Now we can take the cost of goods purchased, that \$181,000, and bring it up to the cost of goods sold calculation. We input it into the cost of goods sold purchased, then we can add our beginning inventory.

Cost of Goods Sold Calculation	
Beginning Inventory	\$500,000
+ Cost of Goods Purchased	\$181,000
= Goods Available for Sale	\$681,000
- Ending Inventory	
= Cost of Goods Sold	

This sum equals our goods available for sale: beginning inventory plus cost of goods purchased equals goods available for sale.

Finally, we subtract out our ending inventory--what we have left on hand--to equal the cost of goods sold.

Cost of Goods Sold Calculation	
Beginning Inventory	\$500,000
+ Cost of Goods Purchased	\$181,000
= Goods Available for Sale	\$681,000
- Ending Inventory	(\$400,000)
= Cost of Goods Sold	\$281,000



BIG IDEA

Again, beginning inventory plus cost of goods purchased equals goods available for sale; subtract ending inventory to provide cost of goods sold.



SUMMARY

Today we **reviewed the expanded income statement**. Within the expanded income statement, we examined the expanded income statement calculations, including the **expanded sales calculation**, the **expanded cost of goods sold calculation**, and the cost of goods purchased calculation within that cost of goods sold. Lastly, we walked through an **example of an expanded cost of goods sold calculation**.

Source: Adapted from Sophia instructor Evan McLaughlin.