

The gross profit method is a technique for estimating the amount of ending inventory. It can be used to estimate each month's ending inventory or it might be used as part of a calculation to determine the approximate amount of inventory that is missing due to theft, fire, or other causes.

The gross profit method uses an assumed gross profit percentage or gross margin ratio (gross profit dollars divided by the sales dollars).

Calculation for Estimating the Ending Inventory Using the Gross Profit Method

Gross profit as a percentage of sales	<u>30%</u>	GP%	(see below)
Cost of goods sold as a percentage of sales	<u>70%</u>	COGS%	(see below)
Total must equal 100%	<u><u>100%</u></u>		
Beginning inventory at cost	<u>\$ 40,000</u>	BI	
Add: Cost of purchases during the period	<u>\$ 230,000</u>	P	
Cost of goods available for sale during the period	<u><u>\$ 270,000</u></u>	GA	(BI + P)
Sales during the period	<u>\$ 320,000</u>	S	
Estimated cost of goods sold percentage	<u>70%</u>	COGS%	(from above)
Estimated cost of goods sold during the period	<u><u>\$ 224,000</u></u>	COGS	(S X COGS%)
Estimated ending inventory at cost	<u><u>\$ 46,000</u></u>	EST	(GA - COGS)

Notes:

If the gross profit percentage for the period under consideration is not known, it can be estimated by using recent financial information:

Sales dollars in recent periods	<u>\$ 300,000</u>	S	
Less: Cost of goods sold in recent periods	<u>\$ 210,000</u>	RCOGS	
Gross profit dollars	<u>\$ 90,000</u>	GP\$	(S - RCOGS)
Gross profit as % of sales	<u><u>30%</u></u>	GP%	(GP\$ / S)
Cost of goods sold as % of sales	<u><u>70%</u></u>	COGS%	(RCOGS / S)

BI The beginning inventory at cost is the same as the previous period's ending inventory at cost.