

Practical Application Exercise

Complete the gross profit, gross margin and markup problems below. The formulas for calculating each of these is shown at the bottom of the page.

1. You sell 15 pieces of a product that costs 6.50 per unit for \$135.00. What is the gross profit in dollars and the gross margin percentage?

1. Sales	\$135.00
2. Cost of Goods Sold	97.50
3. Gross Profit (Line 1 – Line 2)	37.50
4. Gross Margin Percentage (Line 3 divided by Line 1)	27.7%

2. You have just started stocking a new item that costs \$2.35 per unit, and you want to mark it up 28%. What is the selling price?

1. Cost	\$2.35
2. Markup Percentage	28% (.28)
3. Markup (Line 1 x Line 2)	.65
4. Selling Price (Line 1 + Line 3)	27.7%

3. You sell 9 pieces of a product costing 8.50 per unit at a 33% markup. What is the gross profit in dollars and the gross margin percentage.

1. Cost of Goods Sold	\$8.50
2. Markup Percentage	33% (.33)
3. Markup (Line 1 x Line 2)	2.80
4. Selling Price (each) (Line 1 + Line 3)	\$11.30
5. Order Quantity	9
6. Selling Price — Order (Line 4 x Line 5)	101.70
7. Cost of Goods Sold — Order (Line 1 x Line 5)	76.50
8. Gross Profit (Line 6 – Line 7)	25.20
9. Gross Margin Percentage (Line 8 divided by Line 6 x 100)	24.7%

4. The outside salesperson is negotiating with a customer for an order of 50 pieces of a product that sells for \$18 per unit and has a 25% gross margin. The salesman finally gives the customer a price of \$17.20 per unit. Calculate the new gross margin and the decrease in both margin and dollars from the original price.

	Regular Price
1. Selling Price	\$ 18.00
2. Gross Margin %	25.0%
3. Gross Profit (Line 1 x Line 2)	4.50
4. Cost of Goods Sold (Line 1 – Line 3)	13.50
5. Order Quantity	50

6. Selling Price — Order (Line 1 x Line 5)	900.00
7. Cost of Goods Sold — Order (Line 4 x Line 5)	675.00
	Discounted Price
1. Selling Price	\$ 17.20
2. Gross Margin % (Line 3 divided by Line 1)	21.5%
3. Gross Profit (Line 1 – Line 4)	3.70
4. Cost of Goods Sold (Same as Line 4 above)	13.50
5. Order Quantity	50
6. Selling Price — Order (Line 1 x Line 5)	860.00
7. Cost of Goods Sold — Order (Line 4 x Line 5)	675.00
8. Decrease in Gross Margin % (100 – (21.5/25))	14%

Formulas:

To calculate gross profit: Sales - Cost of Goods Sold = Gross Profit

To calculate gross margin percentage: (Gross Profit/Selling Price) x 100 = GM%

To find selling cost when markup is known: Cost +(markup x cost) = Selling Cost.

To find markup when selling cost is known: (Gross Profit/Product Cost) x 100 = Markup

NOTE: The multiplication times 100 changes the actual result to a percentage. For instance, 20/80 = .25. We multiply by 100 to get 25%.