

## Example 2.3 How to Calculate the Direct Materials Used in Production

BlueDenim Company makes blue jeans. On May 1, BlueDenim had \$68,000 of materials in inventory. During the month of May, BlueDenim purchased \$210,000 of materials. On May 31, materials inventory equaled \$22,000.

### Required:

Calculate the cost of direct materials used in production for the month of May.

### Solution:

Materials inventory, May 1	\$ 68,000
Purchases	210,000
Materials inventory, May 31	(22,000)
Direct materials used in production	<u>\$256,000</u>

**Direct materials used in production:**

<b>Beginning materials inventory</b>	\$ 68,000
<b>+ Purchases of materials</b>	<b>\$210,000</b>
<b>- Ending materials inventory</b>	<b><u>(\$ 22,000)</u></b>
	<b>\$256,000</b>
<b>+ Direct labor</b>	<b>\$135,000</b>
<b>+ Manufacturing overhead</b>	<b>\$150,000</b>
<b>+ Beginning WIP inventory</b>	<b>\$ 50,000</b>
<b>- Ending WIP inventory</b>	<b><u>(\$ 16,000)</u></b>
<b>Cost of goods manufactured</b>	<b><u>\$575,000</u></b>

**Required:**

Calculate the cost of goods manufactured for the month of May.

**Solution:**

Direct materials used in production*	\$256,000
Direct labor	135,000
Manufacturing overhead	<u>150,000</u>
Total manufacturing cost for May	\$541,000
WIP, May 1	50,000
WIP, May 31	<u>(16,000)</u>
Cost of goods manufactured	<u><u>\$575,000</u></u>

\*Direct Materials = \$68,000 + \$210,000 - \$22,000 = \$256,000

► Details

## Exhibit 2.6 Cost of Goods Sold

Cost of goods manufactured	\$ 575,000
+ Beginning finished goods inventory	\$ 50,000
- Ending finished goods inventory	<u>(\$130,000)</u>
Cost of goods sold	<u><u>\$ 495,000</u></u>

► Details

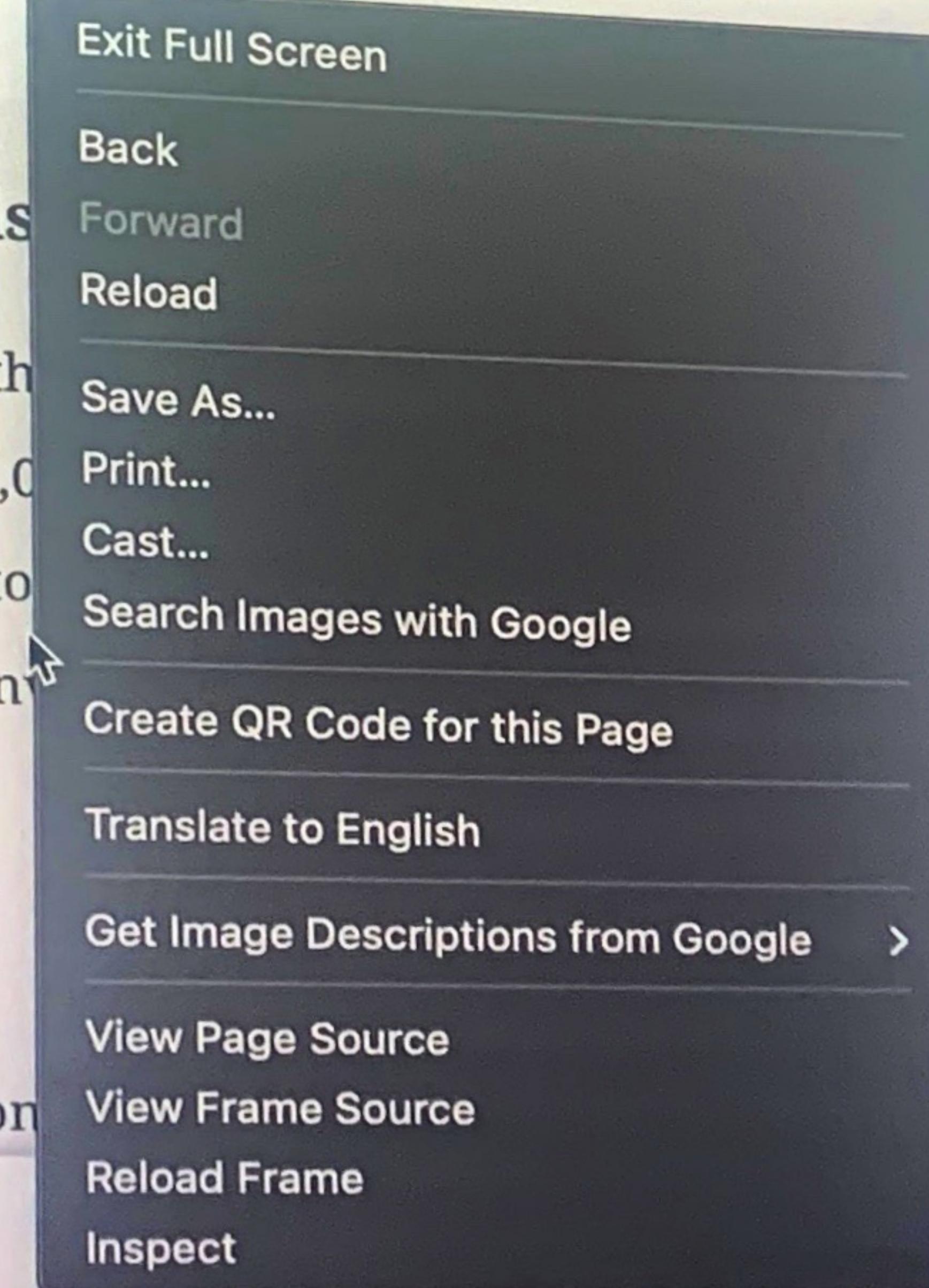
Example 2.5 shows how to calculate the cost of goods sold.

### Example 2.5 How to Calculate Cost of Goods

BlueDenim Company makes blue jeans. During the month, 16,000 units were completed at a cost of goods manufactured of \$575,000. At the beginning of the month, BlueDenim had 10,000 units in the finished goods inventory. By December 31, the company had 26,000 units in the finished goods inventory.

#### Required:

1. Prepare a cost of goods sold statement for the month.



## Exhibit 2.6 Cost of Goods Sold

Cost of goods manufactured	\$ 575,000
+ Beginning finished goods inventory	\$ 50,000
- Ending finished goods inventory	<u>(\$130,000)</u>
Cost of goods sold	<u><u>\$ 495,000</u></u>

► Details

Example 2.5 shows how to calculate the cost of goods sold.

### Example 2.5 How to Calculate Cost of Goods Sold

BlueDenim Company makes blue jeans. During the month of May, 115,000 pairs of jeans were completed at a cost of goods manufactured of \$575,000. Suppose that on May 1, BlueDenim had 10,000 units in the finished goods inventory costing \$50,000 and on May 31, the company had 26,000 units in the finished goods inventory costing \$130,000.

#### Required:

1. Prepare a cost of goods sold statement for the month of May.

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**BlueDenim Company**  
**Cost of Goods Sold Statement**  
**For the Month of May**

Cost of goods manufactured	\$ 575,000
Finished goods inventory, May 1	50,000
Finished goods inventory, May 31	(130,000)
Cost of goods sold	<u>\$ 495,000</u>

## ► Details

2.

## Number of units sold:

Finished goods inventory, May 1	10,000
Units finished during May	115,000
	(26,000)
Finished goods inventory, May 31	<u>99,000</u>
Units sold during May	

## Example 2.6 How to Prepare an Income Statement for a Manufacturing Firm

Recall that BlueDenim Company sold 99,000 pairs of jeans during the month of May at a total cost of \$495,000. Each pair sold at a price of \$8. BlueDenim also incurred two types of selling costs: commissions equal to 10% of the sales price and fixed selling expense of \$120,000. Administrative expense totaled \$85,000.

### Required:

Prepare an income statement for BlueDenim for the month of May.

### Solution:

BlueDenim Company Income Statement For the Month of May		
Sales revenue ( $99,000 \times \$8$ )		\$792,000
Cost of goods sold		495,000
Gross margin		\$297,000
Less:		
Selling expenses		
Commissions ( $\$792,000 \times 0.10$ )	\$ 79,200	
Fixed selling expenses	120,000	199,200
Administrative expenses		85,000
Operating income		\$ 12,800

## Example 2.7 How to Calculate the Percentage of Sales Revenue for Each Line on the Income Statement

Refer to the income statement for BlueDenim Company in Example 2.6.

### Required:

Calculate the percentage of sales revenue represented by each line of the income statement.

### Solution:

BlueDenim Company  
Income Statement  
For the Month of May

		Percent*
Sales revenue ( $99,000 \times \$8$ )	\$792,000	100.0
Cost of goods sold	<u>495,000</u>	<u>62.5</u>
Gross margin	<u>\$297,000</u>	<u>37.5</u>
Less:		
Selling expenses		
Commissions ( $\$792,000 \times 0.10$ )	\$ 79,200	
Fixed selling expenses	<u>120,000</u>	<u>199,200</u>
Administrative expenses	<u>85,000</u>	<u>10.7</u>
Operating income	<u>\$ 12,800</u>	<u>1.6</u>

\*Start in calculating the percentages.

**Solution:**

**BlueDenim Company**  
**Income Statement**  
**For the Month of May**

	Percent*
Sales revenue ( $99,000 \times \$8$ )	\$792,000 100.0
Cost of goods sold	<u>495,000</u> 62.5
Gross margin	\$297,000 37.5
Less:	
Selling expenses	
Commissions ( $\$792,000 \times 0.10$ )	\$ 79,200
Fixed selling expenses	<u>120,000</u> 199,200 25.2
Administrative expenses	<u>85,000</u> 10.7
Operating income	<u>\$ 12,800</u> 1.6

\*Steps in calculating the percentages:

1. Sales Revenue Percent =  $\$792,000/\$792,000 = 1.00$  or 100% (sales revenue is always 100% of itself)
2. Cost of Goods Sold Percent =  $\$495,000/\$792,000 = 0.625$ , or 62.5%
3. Gross Margin Percent =  $\$297,000/\$792,000 = 0.375$ , or 37.5%
4. Selling Expenses Percent =  $\$199,200/\$792,000 = 0.252$ , or 25.2% (rounded)
5. Administrative Expenses Percent =  $\$85,000/\$792,000 = 0.107$ , or 10.7% (rounded)
6. Operating Income Percent =  $\$12,800/\$792,000 = 0.016$ , or 1.6% (rounded)

► Details

Gross margin percentage varies significantly by industry. For instance, **Kroger's** gross margin percentage as determined from the income statement in its annual report is 23.3% ( $\$30,901,000,000/\$132,498,000,000$ ). However, **Merck's** gross margin percentage as determined