

Managerial Accounting: Costs Terms, Concepts and Classifications

Comparison of Financial and Managerial Accounting

	Financial Accounting	Managerial Accounting
1. Users	External persons who make financial decisions	Managers who plan for and control an organization
2. Time focus	Historical perspective	Future emphasis
3. Verifiability versus relevance	Emphasis on verifiability	Emphasis on relevance for planning and control
4. Precision versus timeliness	Emphasis on precision	Emphasis on timeliness
5. Subject	Primary focus is on the whole organization	Focuses on segments of an organization
6. GAAP	Must follow GAAP and prescribed formats	Need not follow GAAP or any prescribed format
7. Requirement	Mandatory for external reports	Not Mandatory

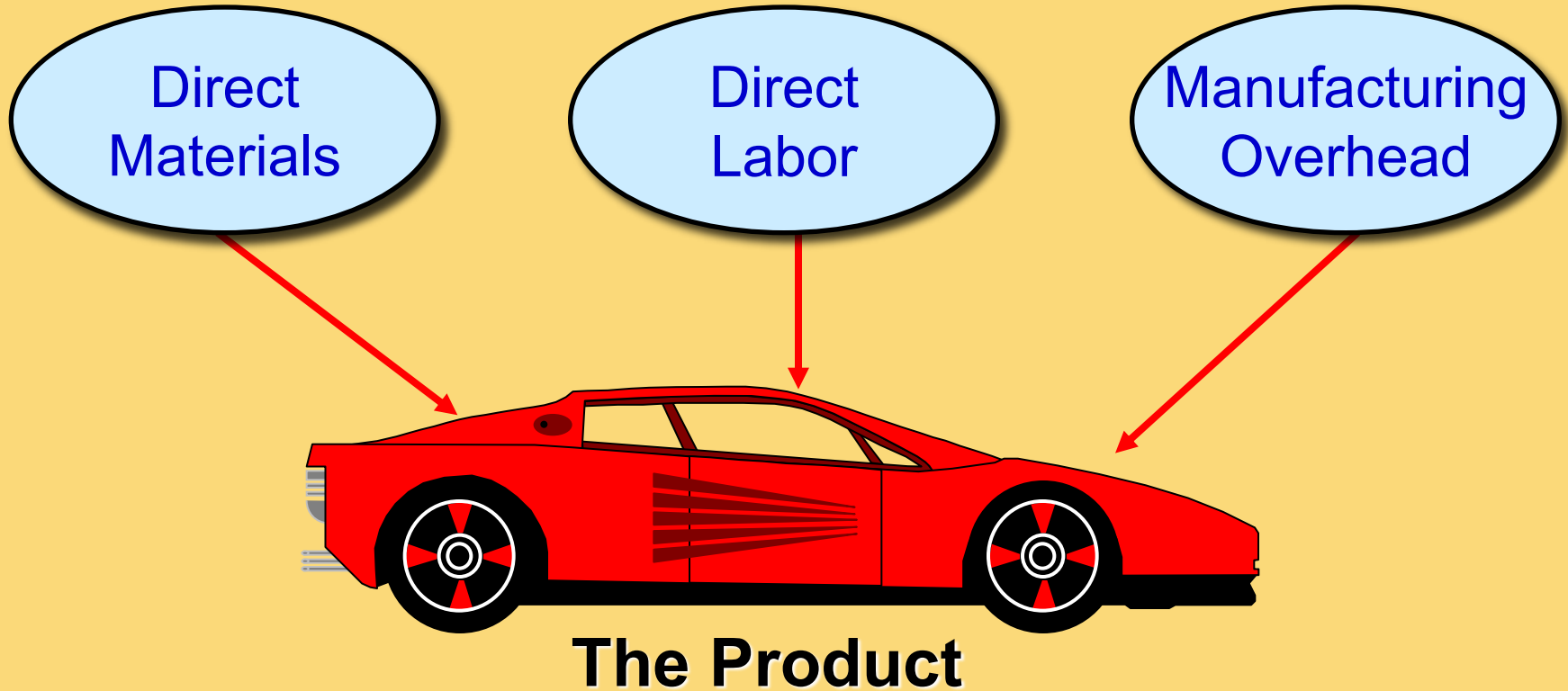
IT/ITes Companies: Type

1. Software Companies: Service Company
2. Hardware Companies: Merchandising
3. Hardware Companies: Manufacturing/Assembling

Basic Cost Classifications

- Product/Manufacturing Cost vs. Period/Non-manufacturing Cost
- Direct Cost vs. Indirect Cost
- Fixed Cost vs. Variable Cost
- Sunk Cost vs. Opportunity Cost

Manufacturing Cost



Non-manufacturing Costs

Selling Costs

Costs necessary to get the order and deliver the product.

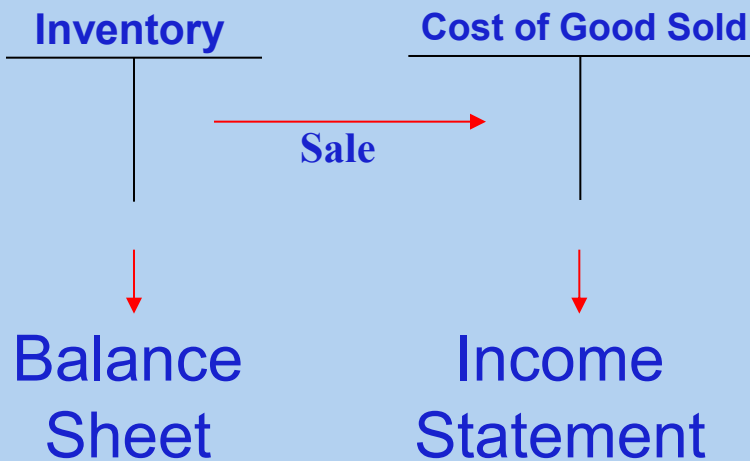
Administrative Costs

All executive, organizational, and clerical costs.

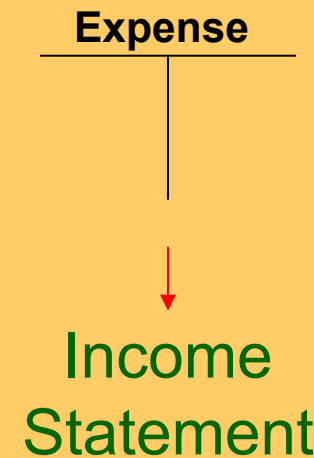


Product Costs Versus Period Costs

Product costs include direct materials, direct labor, and manufacturing overhead.



Period costs include all selling costs and administrative costs.



Quick Check ✓

Which of the following costs would be considered a period rather than a product cost in an IT manufacturing company?

- A. Manufacturing equipment depreciation.
- B. Property taxes on corporate headquarters.
- C. Direct materials costs.
- D. Electrical costs to light the production facility.
- E. Sales commissions.

Quick Check ✓

Which of the following costs would be considered a period rather than a product cost in an IT manufacturing company?

A. Manufacturing equipment depreciation.

☒ B. Property taxes on corporate headquarters.

C. Direct materials costs.

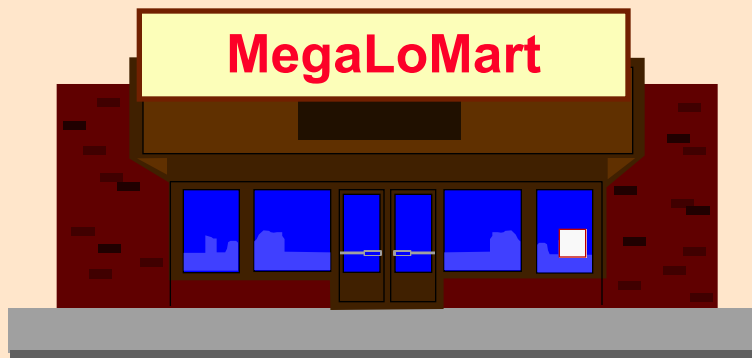
D. Electrical costs to light the production facility.

☒ E. Sales commissions.

Comparing Merchandising and Manufacturing Activities

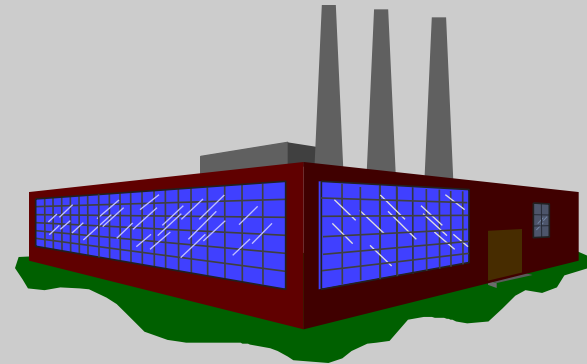
Merchandisers . . .

- ◆ Buy finished goods.
- ◆ Sell finished goods.



Manufacturers . . .

- ◆ Buy raw materials.
- ◆ Produce and sell finished goods.



Balance Sheet

Merchandiser

Current assets

- ◆ Cash
- ◆ Receivables
- ◆ Prepaid Expenses
- ◆ Merchandise Inventory

Manufacturer

Current Assets

- Cash
- Receivables
- Prepaid Expenses
- Inventories
 - Raw Materials
 - Work in Process
 - Finished Goods

Balance Sheet

Merchandiser

Current assets

- ◆ Cash
- ◆ Receivables
- ◆ Prepaid Expenses

Partially complete products – some material, labor, or overhead has been added.

Manufacturer

Current Assets

- Cash

Materials waiting to be processed.

- Inventories

- Raw Materials
- Work in Process
- Finished Goods

Completed products awaiting sale.



The Income Statement

Cost of goods sold for manufacturers differs only slightly from cost of goods sold for merchandisers.

Merchandising Company

Cost of goods sold:

Beg. merchandise inventory	\$ 14,200
+ Purchases	<u>234,150</u>
Goods available for sale	\$ 248,350
- Ending merchandise inventory	<u>(12,100)</u>
= Cost of goods sold	<u><u>\$ 236,250</u></u>

Manufacturing Company

Cost of goods sold:

Beg. finished goods inv.	\$ 14,200
+ Cost of goods manufactured	<u>234,150</u>
Goods available for sale	\$248,350
- Ending finished goods inventory	<u>(12,100)</u>
= Cost of goods sold	<u><u>\$236,250</u></u>

Basic Equation for Inventory Accounts

**Beginning
balance**

+

**Additions
to inventory**

=

**Ending
balance**

+

**Withdrawals
from
inventory**



Quick Check ✓

If your inventory balance at the beginning of the month was \$1,000, you bought \$100 during the month, and sold \$300 during the month, what would be the balance at the end of the month?

- A. \$1,000.
- B. \$ 800.
- C. \$1,200.
- D. \$ 200.

Quick Check ✓

If your inventory balance at the beginning of the month was \$1,000, you bought \$100 during the month, and sold \$300 during the month, what would be the balance at the end of the month?

A. \$1,000.

☒ B. \$ 800.

C. \$1,200.

D. \$ 200.

$$\$1,000 + \$100 = \$1,100$$

$$\$1,100 - \$300 = \$800$$

Schedule of Cost of Goods Manufactured

Calculates the cost of raw material, direct labor and manufacturing overhead used in production.

Calculates the manufacturing costs associated with goods that were finished during the period.



Product Cost Flows

<u>Raw Materials</u>	<u>Manufacturing Costs</u>	<u>Work In Process</u>
Beginning raw materials inventory		
+ Raw materials purchased		
<u>= Raw materials available for use in production</u>		
- Ending raw materials inventory		
<u>= Raw materials used in production</u>	Direct materials	

As items are removed from raw materials inventory and placed into the production process, they are called direct materials.

Product Cost Flows

Raw Materials	Manufacturing Costs	Work In Process
<p>Beginning raw materials inventory</p> <p>+ Raw materials purchased</p> <hr/> <p>= Raw materials available for use in production</p> <p>– Ending raw materials inventory</p> <hr/> <p>= Raw materials used in production</p> <hr/>	<p>Direct materials</p> <p>+ Direct labor</p> <p>+ Mfg. overhead</p> <hr/> <p>= Total manufacturing costs</p> <hr/>	<div data-bbox="1329 439 1877 1003"> <p>Conversion costs are costs incurred to convert the direct material into a finished product.</p> </div> <hr/> <hr/>

Product Cost Flows

<u>Raw Materials</u>	<u>Manufacturing Costs</u>	<u>Work In Process</u>
Beginning raw materials inventory	Direct materials	Beginning work in process inventory
+ Raw materials purchased	+ Direct labor	
	+ <u>Mfg. overhead</u>	+ Total manufacturing costs
= Raw materials available for use in production	= <u>Total manufacturing costs</u>	= Total work in process for the period
- Ending raw materials inventory		
= <u>Raw materials used in production</u>		

All manufacturing costs incurred during the period are added to the beginning balance of work in process.

Product Cost Flows

<u>Raw Materials</u>	<u>Manufacturing Costs</u>	<u>Work In Process</u>
Beginning raw materials inventory	Direct materials	Beginning work in process inventory
+ Raw materials purchased	+ Direct labor	+ Total manufacturing costs
<u>= Raw materials available for use in production</u>	+ <u>Mfg. overhead</u>	<u>= Total work in process for the period</u>
- Ending raw materials	<u>= Total manufacturing costs</u>	- Ending work in process inventory
		<u>= Cost of goods manufactured</u>

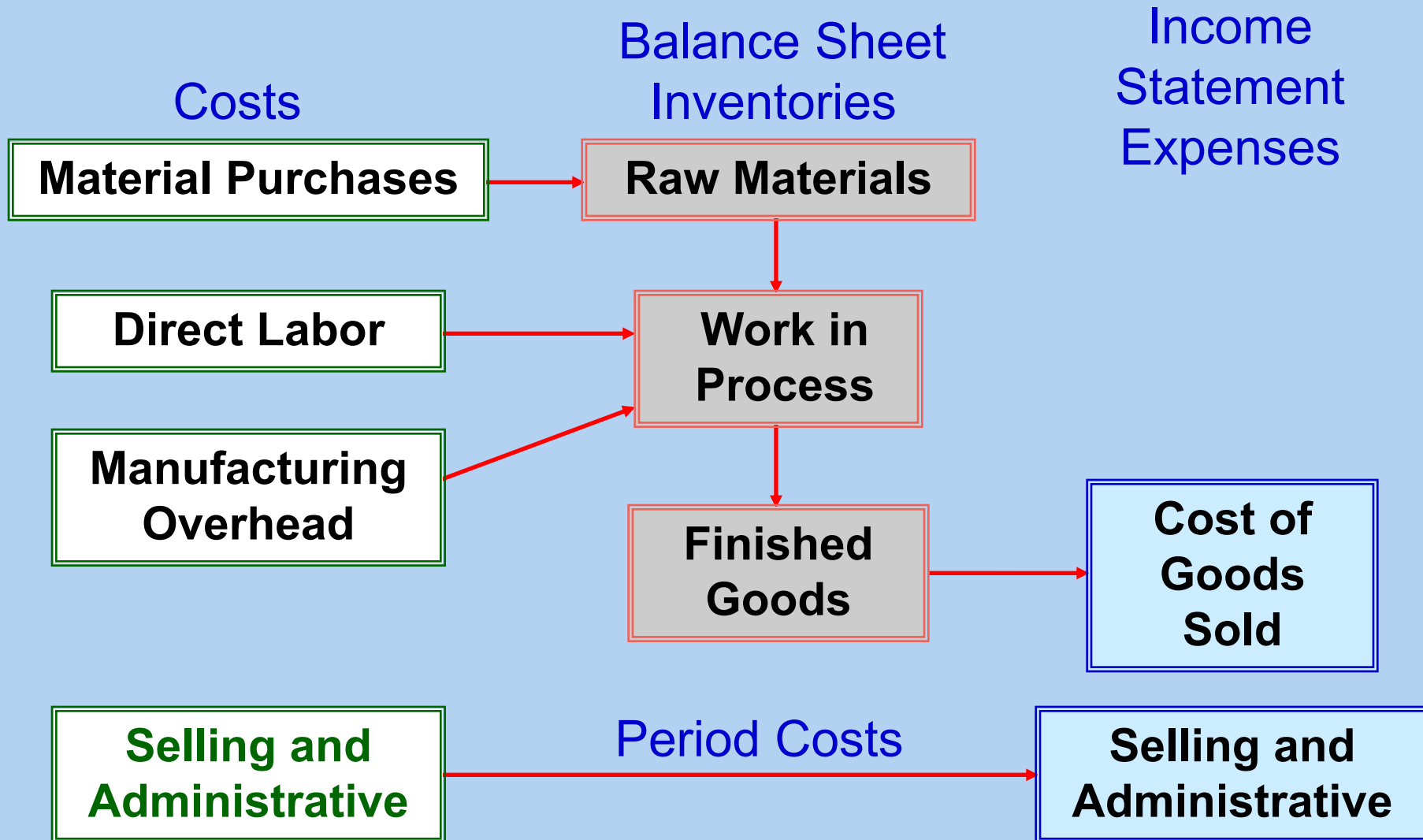
Costs associated with the goods that are completed during the period are transferred to finished goods inventory.



Product Cost Flows

Work In Process	Finished Goods
Beginning work in process inventory	Beginning finished goods inventory
+ Manufacturing costs for the period	+ Cost of goods manufactured
= Total work in process for the period	= Cost of goods available for sale
- Ending work in process inventory	- Ending finished goods inventory
= Cost of goods manufactured	= Cost of goods sold

Manufacturing Cost Flows



Quick Check ✓

Beginning raw materials inventory was \$32,000. During the month, \$276,000 of raw material was purchased. A count at the end of the month revealed that \$28,000 of raw material was still present. What is the cost of direct material used?

- A. \$276,000
- B. \$272,000
- C. \$280,000
- D. \$ 2,000

Quick Check ✓

Beginning raw materials inventory was \$32,000. During the month, \$276,000 of raw material was purchased. A count at the end of the month revealed that \$28,000 of raw material was still present. What is the cost of raw materials used in production?

- A. \$276,000
- B. \$272,000
- C. \$280,000**
- D. \$ 2,000

Beg. raw materials	\$ 32,000
+ Raw materials purchased	276,000
= Raw materials available for use in production	\$ 308,000
– Ending raw materials inventory	28,000
= Raw materials used in production	<u>\$ 280,000</u>

Quick Check ✓

Direct materials used in production totaled \$280,000. Direct labor was \$375,000 and factory overhead was \$180,000. What were total manufacturing costs incurred for the month?

- A. \$555,000
- B. \$835,000
- C. \$655,000
- D. Cannot be determined.

Quick Check ✓

Direct materials used in production totaled \$280,000. Direct labor was \$375,000 and factory overhead was \$180,000. What is the total manufacturing cost for the month?

- A. \$555,000
- ☒ B. \$835,000
- C. \$655,000
- D. Cannot be determined.

Direct Materials	\$280,000
+ Direct Labor	375,000
+ Mfg. Overhead	180,000
<hr/>	
= Mfg. Costs Incurred	
for the Month	\$835,000
<hr/>	

Quick Check ✓

Beginning work in process was \$125,000. Manufacturing costs incurred for the month were \$835,000. There were \$200,000 of partially finished goods remaining in work in process inventory at the end of the month. What was the cost of goods manufactured during the month?

- A. \$1,160,000
- B. \$ 910,000
- C. \$ 760,000
- D. Cannot be determined.

Quick Check ✓

Beginning work in process was \$125,000. Manufacturing costs incurred for the month were \$835,000. There were \$200,000 of partially finished goods remaining in work in process inventory at the end of the month. What was the cost of goods manufactured during the month?

- A. \$1,160,000
- B. \$ 910,000
- C. \$ 760,000**
- D. Cannot be determined.

Beginning work in process inventory	\$ 125,000
+ Mfg. costs incurred for the period	835,000
= Total work in process during the period	\$ 960,000
– Ending work in process inventory	200,000
= Cost of goods manufactured	<u>\$ 760,000</u>

Quick Check ✓

Beginning finished goods inventory was \$130,000. The cost of goods manufactured for the month was \$760,000. And the ending finished goods inventory was \$150,000. What was the cost of goods sold for the month?

- A. \$ 20,000.
- B. \$740,000.
- C. \$780,000.
- D. \$760,000.

Quick Check ✓

Beginning finished goods inventory was \$130,000. The cost of goods manufactured for the month was \$760,000. And the ending finished goods inventory was \$150,000. What was the cost of goods sold for the month?

A. \$ 20,000.

☒ B. \$740,000.

C. \$780,000.

D. \$760,000.

$$\$130,000 + \$760,000 = \$890,000$$

$$\$890,000 - \$150,000 = \$740,000$$

Cost Classifications for Predicting Cost Behavior

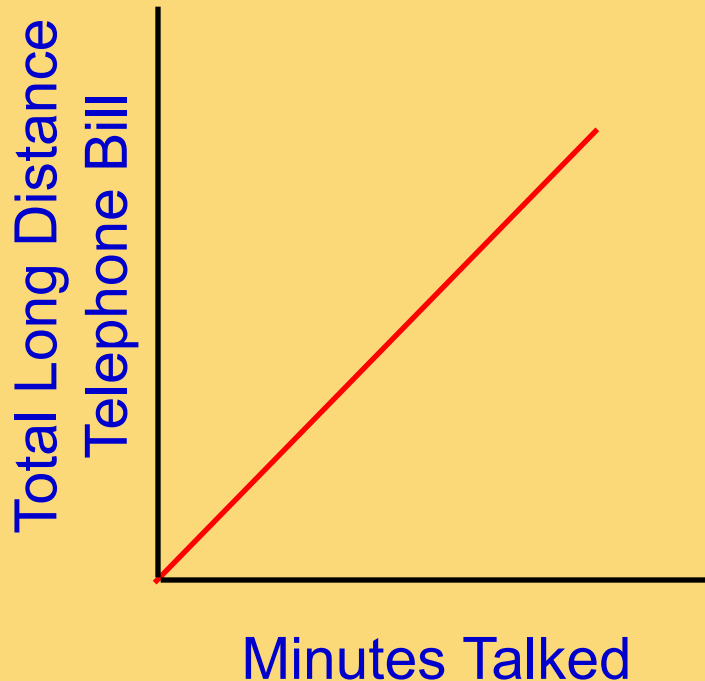


How a cost will react to changes in the level of activity within the relevant range.

- ◆ Total **variable costs** change when activity changes.
- ◆ Total **fixed costs** remain unchanged when activity changes.

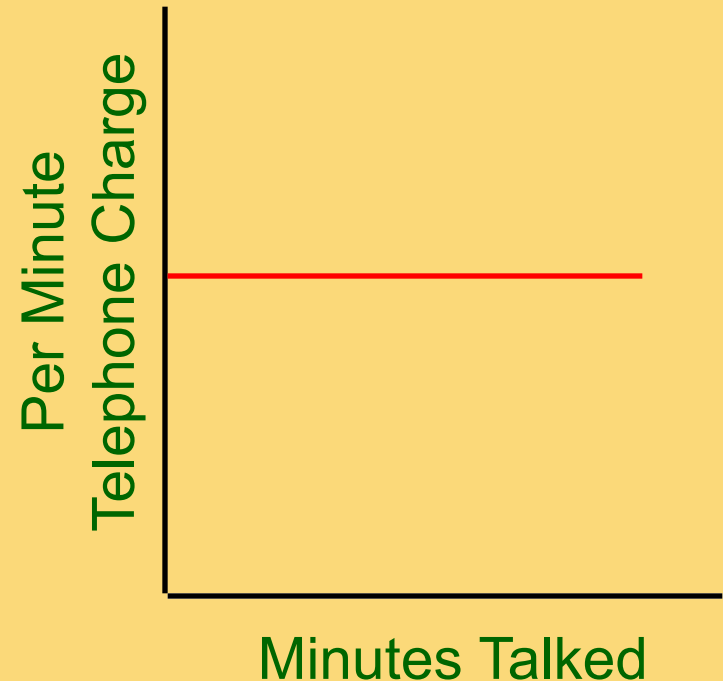
Variable Cost

Your **total long distance** telephone bill is based on how many minutes you talk.



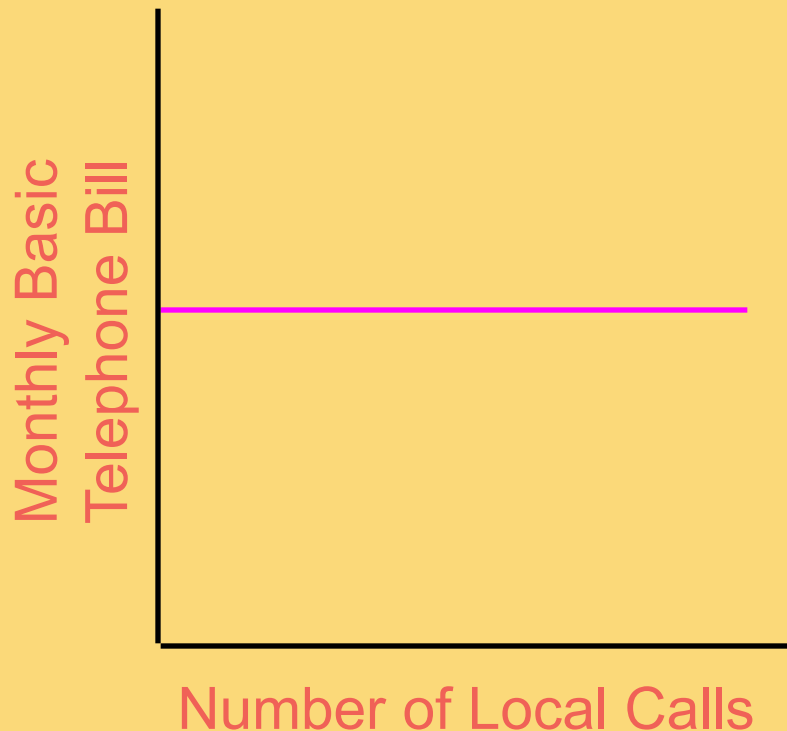
Variable Cost Per Unit

The **cost per long distance minute** talked is constant. For example, 10 cents per minute.



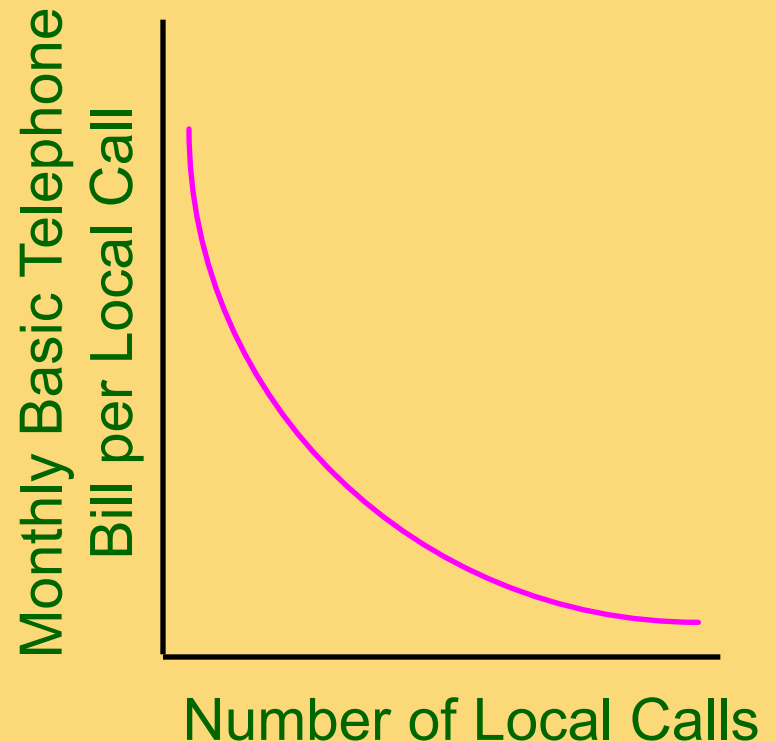
Fixed Cost

Your monthly **basic telephone bill** probably does not change when you make more local calls.



Fixed Cost Per Unit

The average fixed cost **per local call** decreases as more local calls are made.



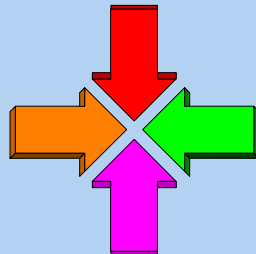
Cost Classifications for Predicting Cost Behavior

Behavior of Cost (within the relevant range)		
Cost	In Total	Per Unit
Variable	Total variable cost changes as activity level changes.	Variable cost per unit remains the same over wide ranges of activity.
Fixed	Total fixed cost remains the same even when the activity level changes.	Average fixed cost per unit goes down as activity level goes up.

Assigning Costs to Cost Objects

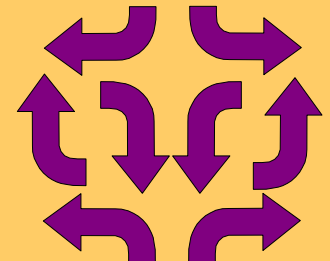
Direct costs

- Costs that can be easily and conveniently traced to a unit of product or other cost object.
- Examples: direct material and direct labor



Indirect costs

- Costs that cannot be easily and conveniently traced to a unit of product or other cost object.
- Example: manufacturing overhead



Differential Cost and Revenue

Costs and revenues that differ among alternatives.

Example: You have a job paying \$1,500 per month in your hometown. You have a job offer in a neighboring city that pays \$2,000 per month. The commuting cost to the city is \$300 per month.

Differential revenue is:

$$\text{\$2,000} - \text{\$1,500} = \text{\$500}$$

Differential cost is:

$$\text{\$300}$$

Opportunity Cost

The potential benefit that is given up when one alternative is selected over another.

Example: If you were not attending college, you could be earning \$15,000 per year. Your opportunity cost of attending college for one year is \$15,000.



Sunk Costs

Sunk costs have already been incurred and cannot be changed now or in the future. They should be ignored when making decisions.

Example: i) Cost of getting license of a business.
iii) Suppose you bought a technology by \$ 20,000 which is obsolete now.

Quick Check ✓

Suppose you are trying to decide whether to drive or take the train to Portland to attend a concert. You have ample cash to do either, but you don't want to waste money needlessly. Is the cost of the train ticket relevant in this decision? In other words, should the cost of the train ticket affect the decision of whether you drive or take the train to Portland?

- A. Yes, the cost of the train ticket is relevant.
- B. No, the cost of the train ticket is not relevant.

Quick Check ✓

Suppose you are trying to decide whether to drive or take the train to Portland to attend a concert. You have ample cash to do either, but you don't want to waste money needlessly. Is the cost of the train ticket relevant in this decision? In other words, should the cost of the train ticket affect the decision of whether you drive or take the train to Portland?

☒ A. Yes, the cost of the train ticket is relevant.

☐ B. No, the cost of the train ticket is not relevant.

Quick Check ✓

Suppose you are trying to decide whether to drive or take the train to Portland to attend a concert. You have ample cash to do either, but you don't want to waste money needlessly. Is the annual cost of licensing your car relevant in this decision?

- A. Yes, the licensing cost is relevant.
- B. No, the licensing cost is not relevant.

Quick Check ✓

Suppose you are trying to decide whether to drive or take the train to Portland to attend a concert. You have ample cash to do either, but you don't want to waste money needlessly. Is the annual cost of licensing your car relevant in this decision?

A. Yes, the licensing cost is relevant.

☒ B. No, the licensing cost is not relevant.