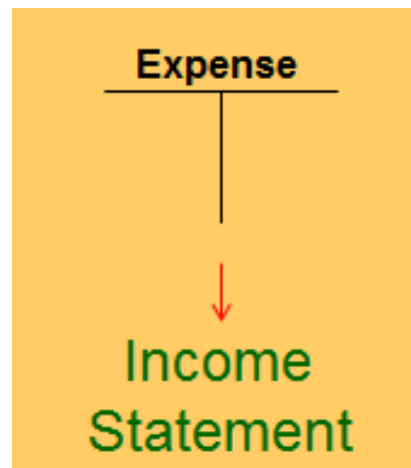
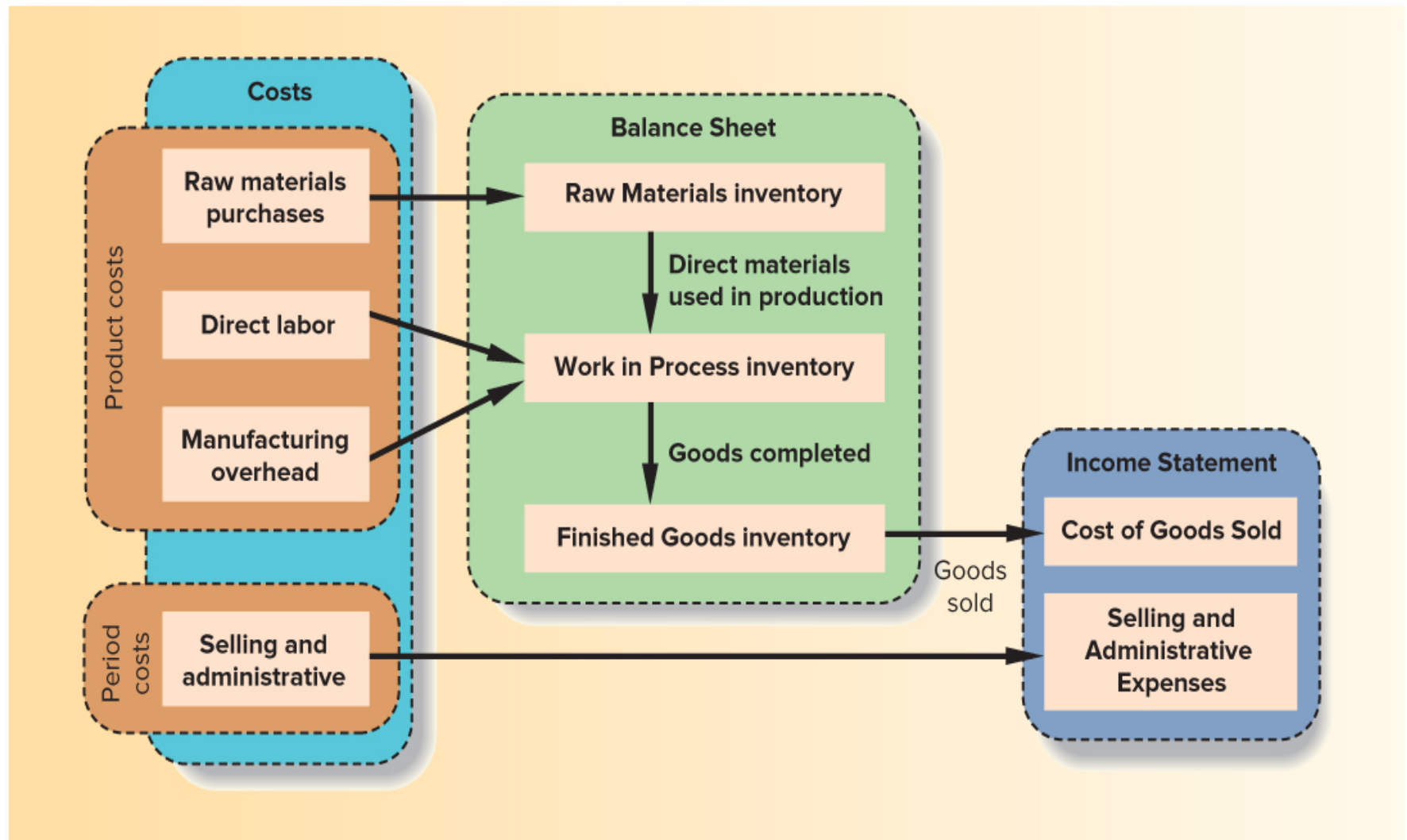


Cost Classifications for Preparing Financial Statements (2 of 2)

Period costs include all selling costs and administrative costs (*sales commissions, advertising, executive salaries, public relations, rental costs of administrative offices, etc*).



Expensed in the Income Statement in the period in which they are incurred (using the rule of accrual accounting)

EXHIBIT 1-2 Cost Flows and Classifications in a Manufacturing Company


Concept Check 1

Which of the following costs would be considered a **period rather than a product cost** in a 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

Concept Check 1a

Which of the following costs would be considered a period rather than a product cost in a 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

Answer: B, E

Learning Objective 4

Understand cost classifications used to **predict cost behavior: variable costs, fixed costs, and mixed costs.**

Cost Classifications for Predicting Cost Behavior

- **Cost behavior** refers to how a cost will react to changes in the level of activity.
- The most common classifications are:
 - Variable costs.
 - Fixed costs.
 - Mixed costs.

Variable Cost

- A **variable cost** *varies, in total, in direct proportion to changes in the level of activity.*
- *A variable cost per unit is constant.*

An Activity Base (Cost Driver)

- An **activity base** is a measure of what causes the incurrence of a variable cost.
 - Units produced
 - Machine hours
 - Miles driven
 - Labor hours

Fixed Cost

- A **fixed cost** is a cost that remains constant, in total, regardless of changes in the level of the activity.
- If expressed **on a per unit basis**, the average fixed cost per unit varies inversely with changes in activity.

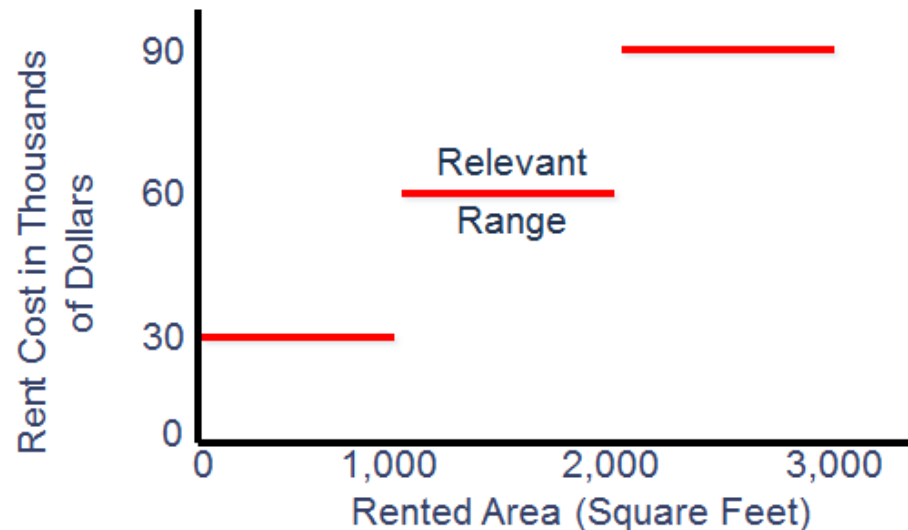
Types of Fixed Costs

- Committed
 - Long term, cannot be significantly reduced in the short term
- Discretionary
 - May be altered in the short term by current managerial decisions

The Linearity Assumption and the Relevant Range

- Management accountants ordinarily assume that costs are strictly linear: the relation between cost and activity can be represented by a straight line within a narrow band of activity known as a **relevant range** (*the range of activity within which the assumption that cost behavior is strictly linear is reasonably valid*).
- *The relevant range of activity pertains to fixed cost as well as variable costs.*
- For example, assume office space is available at a rental rate of \$30,000 per year in increments of 1,000 square feet.
- Fixed costs would increase in a step fashion at a rate of \$30,000 for each additional 1,000 square feet.

Relevant Range: Graphic



The relevant range of activity for a fixed cost is the range of activity over which the graph of the cost is flat.

Comparison of Cost Classifications for Predicting Cost Behavior

Behavior of Cost (within the relevant range)

Cost	In Total	Per Unit
Variable cost	Total variable cost increases and decreases in proportion to changes in the activity level.	Variable cost per unit remains constant.
Fixed cost	Total fixed cost is not affected by changes in the activity level within the relevant range.	Fixed cost per unit decreases as the activity level rises and increases as the activity level falls.

Concept Check 2

Which of the following costs would be variable with respect to the number of ice cream cones sold at a Baskin & Robbins? (There may be more than one correct answer.)

- A. The cost of lighting the store
- B. The wages of the store manager
- C. The cost of ice cream
- D. The cost of napkins for customers

Concept Check 2a

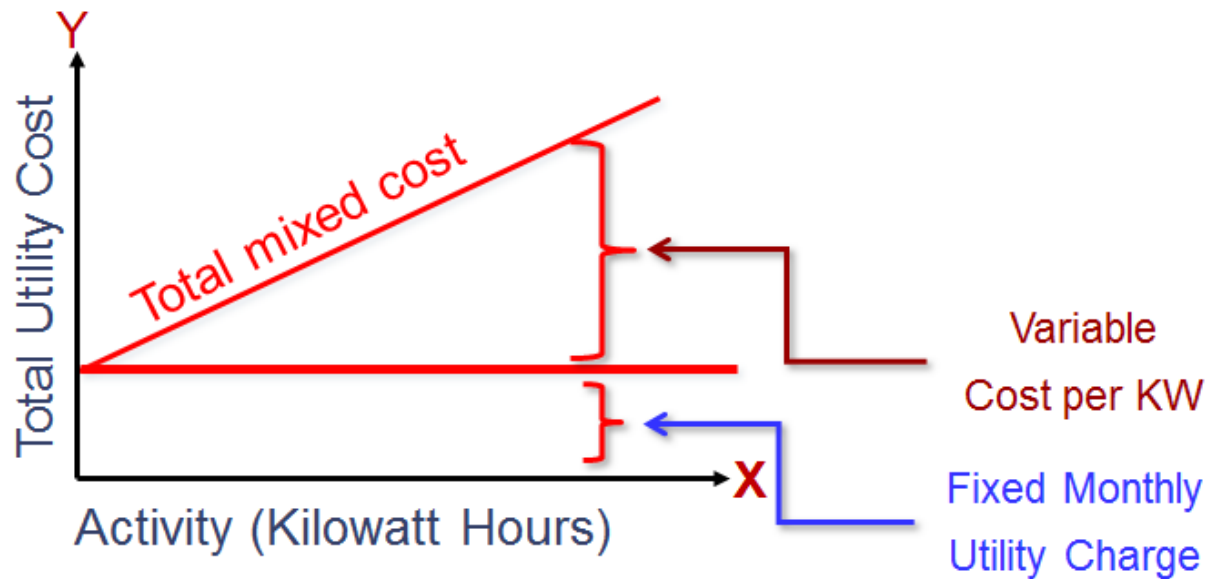
Which of the following costs would be variable with respect to the number of ice cream cones sold at a Baskin & Robbins? (There may be more than one correct answer.)

- A. The cost of lighting the store
- B. The wages of the store manager
- C. The cost of ice cream
- D. The cost of napkins for customers

Answer: C, D

Mixed Costs (1 of 2)

A mixed cost contains both variable and fixed elements. Consider the example of utility cost.



Mixed Costs (2 of 2)

The total mixed cost line can be expressed as an equation: $Y = a + bX$

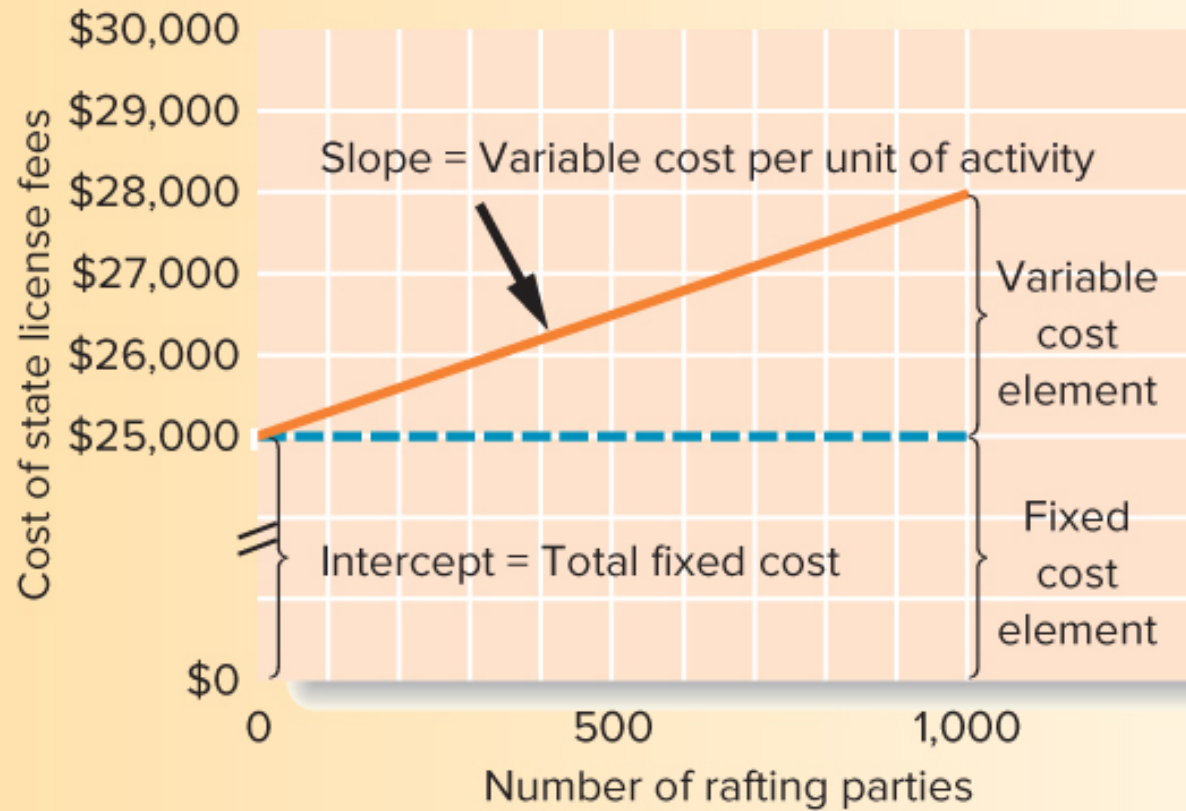
Where:

Y = The total mixed cost

a = The total fixed cost (the vertical intercept of the line)

b = The variable cost per unit of activity (the slope of the line)

X = The level of activity



Mixed Costs – An Example

If your fixed monthly utility charge is \$40, your variable cost is \$0.03 per kilowatt hour, and your monthly activity level is 2,000 kilowatt hours, what is the amount of your utility bill?

$$Y = a + bX$$

$$Y = \$40 + (\$0.03 \times 2,000)$$

$$Y = \$100$$