Cost Behavior – Analysis and Use

Mixed Costs: Contains both variable and fixed cost elements.

$Y = a + bx$

Y = Total Mixed Costs, Dependent Variable

A = Total Fixed Costs

B = Variable Costs per unit

X = Level of Activity, Independent Variable

*This equation allows you to calculate what the total mixed costs would be for any level of activity within the relevant range

*This is the same as the slope formula learned in algebra Y = mx + b, and the point-slope formula $y-y_1 = m(x-x_1)$

High-Low Method: A method of separating a mixed cost into its fixed and variable elements by analyzing the change in cost between the high and low activity levels

$$\text{Variable Cost} = \frac{\text{Change In Cost}}{\text{Change in Activity}} = \text{Slope of the Line} = b$$

$$B = \frac{Y_2 - Y_1}{X_2 - X_1}$$

*Then use B, and two points (either X_2 & Y_2 OR X_1 & Y_1) to solve for Total Fixed costs.

$Y = a + bx$

$A = y - bx$

Fixed cost element = Total Cost minus Variable Cost Element

*Then create equation for your data. Example y = #x +#

Contribution Margin: The amount remaining from sales revenues after variable expenses have been deducted

Sales	xx
Less: Variable Costs	(xx)
= Contribution Margin	xx
Less: Fixed Costs	(xx)
= Net Income	xx