

REGRESSION ANALYSIS WORK SHEET			1. DATE	2. ANALYST			
3. FUNCTION/WORK CENTER			4. CODE	5. WORK UNIT			
6. SOURCE X			7. SOURCE Y				
8. ITEM NO.	a. PERIOD	b. WORK UNITS PROCESSED X	c. PRODUCTIVE HOURS Y	d. X	Y	e. X²	f. Y²
1							
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		ΣX	ΣY	ΣXY		ΣX²	ΣY²
TOTALS							
REMARKS							

**REGRESSIONS ANALYSIS
COMPUTATION**

Enter appropriate figures in the method of least square and compute in the coefficient of correlation

$$(\Sigma X)^2 = (\quad)^2 = \underline{\hspace{2cm}}$$

$$(\Sigma Y)^2 = (\quad)^2 = \underline{\hspace{2cm}}$$

$$(\Sigma X) (\Sigma Y) = (\quad) (\quad) = \underline{\hspace{2cm}}$$

$$r = \frac{N \Sigma XY - \Sigma X \Sigma Y}{\sqrt{[N \Sigma X^2 - (\Sigma X)^2] [N \Sigma Y^2 - (\Sigma Y)^2]}}$$

$$r = \frac{\quad}{\sqrt{[\quad] [\quad]}}$$

$$r = \text{COEFFICIENT OF CORRELATION} = \underline{\hspace{2cm}}$$

**STRAIGHT LINE
FORMULA**

Enter the appropriate figures from line 9 to compute the straight line formula (method of least square)

$$y = a + bx$$

$$a = \frac{(\Sigma Y) (\Sigma X^2) - (\Sigma X) (\Sigma XY)}{n(\Sigma X^2) - (\Sigma X)^2}$$

$$b = \frac{n(\Sigma XY) - (\Sigma X) (\Sigma Y)}{n(\Sigma X^2) - (\Sigma X)^2}$$

$$a = \underline{\hspace{2cm}}$$

$$b = \underline{\hspace{2cm}}$$

a = y intercept

b = slope