

Pro

Signature: William E. Clarke



1 AUG. 1966

16-1617

FROM: PISTONVILLE DISTRICT

DATE: 01 AUG 1966

W. L. G. S. S.

003

006

007

500

400

LINEAR REGRESSION ANALYSIS - FROM PROTOTYPE TEST DATA					
X	y	xy	X ²		
(PERIOD) ²	MASS				DOF 1 AUG 1966
0.43197	440.	190.067	0.18660	$\Sigma X = 3.36832$	$N = 6$
0.44584	455.499	203.080	0.19877	$\Sigma y = 3505.884$	$\bar{X} = 0.56139$
0.48308	497.078	240.128	0.23337	$\Sigma xy = 2101.574$	$\bar{y} = 584.314$
0.53301	552.857	294.678	0.28410	$\Sigma X^2 = 2.01069$	
0.63499	666.544	423.249	0.40321		
0.83943	893.906	750.372	0.70464		
$b = \frac{\Sigma xy - \bar{X} \Sigma y}{\Sigma X^2 - \bar{X} \Sigma X} = \frac{2101.574 - (0.56139)(3505.884)}{2.01069 - (0.56139)(3.36832)} =$					
$\frac{2101.574 - 1968.166}{2.01069 - 1.89094} = \frac{133.408}{0.11975} = 1114.05$					
$a = \bar{y} - b\bar{X} = 584.314 - (1114.05)(0.56139) =$					
$584.314 - 625.417 = -41.103$					
$y = -41.103 + 1114.05X$					
For food package: $X = 0.48014$; $y = 53.787$ grams					
Actual weight - 53.7939 grams.					
Error = 0.01%					

Date: Aug 1, 1966

Signature:

William E. Oakey

12 meas

100
50 gm

50°F - 120°F
9.10°F

9 20 gm

