12012	Regression summer poper
	N=8
Catrulo	le Coefficient ZX = 2150
	5x's 12100
ho = 0	5 - box Ey, = 1430
	$\bar{\chi} = 4.0$
bs =	$\frac{2(x_i-\bar{x})(y_i-\bar{y})}{2(x_i-\bar{x})^2}$ $\frac{2}{2}$ $\frac{2}{2}$ $\frac{2}{2}$ $\frac{2}{2}$
-	E (x,-x)2 5x19 = 61884
	29 - 41110
=	Exigi - Exizy,
	1.2 - (5x)2
	21(20) (10(30)
b# =	6(9500 - 2150 (1430) 3600 6 -0.55. 931100 = (2150)2 6600 11
100	(218)2 600
	431130
b1 =	286 - 6 (430) = 510 = 51.464
B MSE	$=\frac{SSE}{N-S}=\frac{4(y_1-y_1)^2}{n-2}$
	320 - 320.96 + 250 - 260.46 + 300 -287.96 + 270 - 293.46 +290 - 279.69
	-12-5) -4·177
	-12:5)
	$5^2 = -4.177$
- 12	5)R - 5 x 3600 - 0.8200 5570 5x5y 660 52920
C K-	SSR 550 (MW 5292)
	3710 377
	n = 0.92042 - 0.6724
	1, 2 0,100x 2
0.3	neally proportion of total vortine about or en is explained by be regular
K.	read proportion by the ready
K	hear proposed by be regula

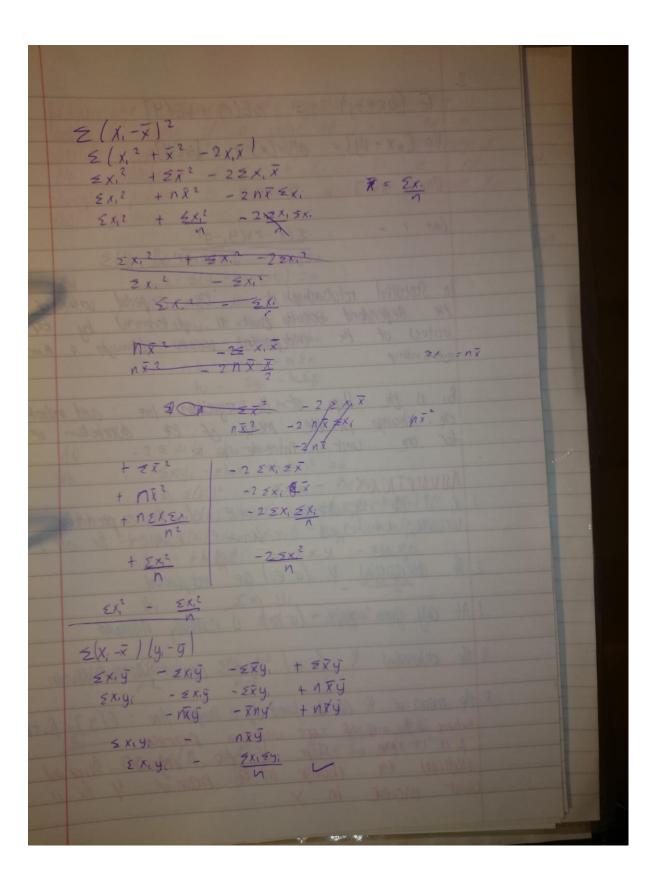
1 would be concered for vote) below 70%. regard - Ei de magrel - men of 0 and consunt coon or

- X 1) He i'm vow of- pedier voices when 1/4

Whow consint for all i:

- Ei or myedal - En or roudly directe - New of y, can be seed by a snought he E(y, 1 = po + p, x, as unknown promer) some on the poly of 1 12 and p 1)

In the

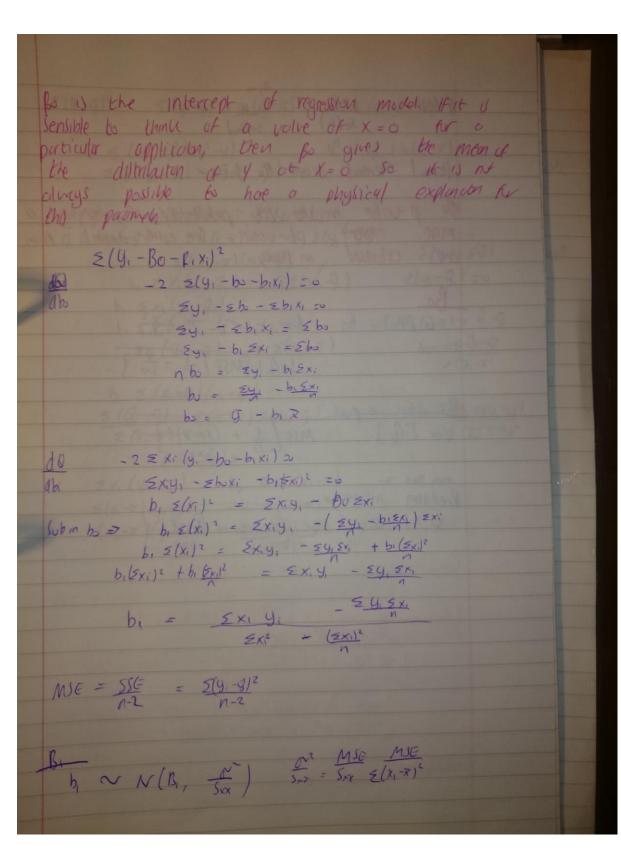


[E (ax+by) = aE(x) + bE(Y] Var [ax+by] = a2Vor[x] + 5° [Vor[y] Var [Sx] = EVALEXIZ $\begin{array}{rcl}
\text{Cont } \Gamma &=& \mathbb{E}(\chi_{i} - \overline{\chi})(\mathcal{G}_{i} - \overline{g}) \\
\sqrt{\mathbb{E}(\chi_{i} - \overline{\chi})^{2}} & \mathbb{E}(\mathcal{G}_{i} - \overline{g})^{2}
\end{array}$ In statutial relationship it is be expelled value of the dependend unally but I determined by the valves of the independent venous through a functional relotionship B: 1) De Slope of De regression line and inductes be change in be meny of the downbutton of y for one unit increase in x ASSUMPTIONS

Xi is the in asserbay value of the predictor vorable, which is a known constant for all i 2 the observation 4: (it en) are interpretent 4. The observers 4: (or Ei) have constant standed deviden 5. The mean of 41 can be pined by a smaght line: Ely.] - B+BX: where so and he are unknown parameter

Let the stope of the regression line only

Maligner the change in the mean of y for a



1-test bi-bi bi-bi se(bi) Itrale | Stentuck accept the \$1.00 The p-value meaner the probability of observing a max externe t-value (in either drawn) than to are colluded in study Be [B] = B Var = 02 1 + x2 Selbol-MSE[+ 5xx] Var [9,] = MSE [1 + (xn-x)2] Predum menul selver = finse [1++ + &n-x1"]

2 5 (4, -9.) (9.-9) 4, - 9 + 6(x, -x) ≥ 9.(9,-91) - = 9 (9,-9.) = (9+b(x-x)(9,-9) - 5=61-91 9 ε (y(-9) + εb, (x, =) -9 ε(y/-9) Ely1) = 8911 $b_1 \leq (x_1 - x)(y_1 - y_1)$ $b_1 \leq x_1(y_1 - y_1) - x \leq (y_1 - y_1)$ Ely, -9.) =0 b, Ex, (4, -9,1 h(x,-x) = 9,-5 b₁ ≤ x₁(y₁ -y -b₁(x₁-x) ≤ x₁(y₁-y) -b₁ ≤ (x₁-x) br = \(\frac{9}{2}\)\ \(\xi\) h E(X-8)(4-9) h = E(x-x/4,-9) 2 (g, g) E(x, x) E(9, -g:) E(9, 9) & Ex. (9,-9) -b, Ex, (x,-x) -x bom from E(x,-x)(y,-g) - h, E (x,-x)2 \$x,-x)(4,-9) - 5(x,x(4,-9) 5(x,-x)2 E(X-X)2

