x	y	xy	x^2	y^2	$\bar{y}$	$\hat{y}$	$(y-\hat{y})$	$(y-\hat{y})^2$	$(x-\bar{x})$	$(x-\bar{x})^2$
8	17	136	64	289	14.2	19	-2	4	2.4	5.76
6	14	84	36	196	14.2	15	-1	1	0.4	0.16
1	5	5	1	25	14.2	5	0	0	-4.6	21.16
4	12	48	16	144	14.2	11	1	1	-1.6	2.56
9	23	207	81	529	14.2	21	2	4	3.4	11.56
Σx	Σy	Σxy	Σx^2	Σy^2	$\Sigma \bar{y}$	$\Sigma \hat{y}$	$\Sigma(y-\hat{y})$	$\Sigma(y-\hat{y})^2$	$\Sigma(x-\bar{x})$	$\Sigma(x-\bar{x})^2$
28	71	480	198	1183		71		10		41.2

$$b_1 = \frac{n\Sigma xy - [(\Sigma x)(\Sigma y)]}{n\Sigma x^2 - (\Sigma x)^2}$$

$$= \frac{5*480 - [(28)(71)]}{5*198 - (28)^2}$$

$$= \frac{2400 - 1988}{990 - 784} = \frac{412}{206}$$

$$= 2$$

$$b_0 = \bar{y} - b_1\bar{x} = 14.2 - 2(5.6)$$

$$= 14.2 - 11.2 = 3$$

$$SSE = \sum_{i=1}^{n} (y-\hat{y})^2 = 10$$

$$S_e = \sqrt{\frac{SSE}{n-2}}$$

$$= \sqrt{\frac{10}{5-2}}$$

$$= \sqrt{\frac{10}{3}}$$

$$= 1.826$$

$$S_{b_1} = \frac{S_e}{\sqrt{\Sigma(x-\bar{x})^2}}$$

$$= \frac{1.826}{\sqrt{41.2}}$$

$$= \frac{1.826}{6.419} = 0.284$$

$n = 5$

$\bar{y} = \frac{71}{5} = 14.2$

$\bar{x} = \frac{28}{5} = 5.6$

$b_1 = 2$

$b_0 = 3$

$SSE = 10$

$S_e = 1.826$

$S_{b_1} = 0.284$