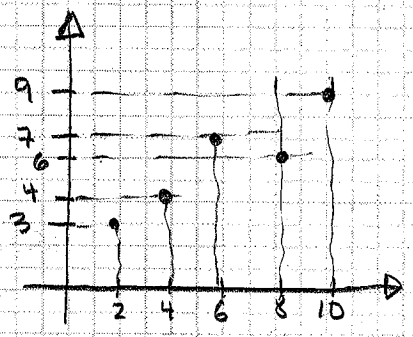
USING THE TI-30XS MULTIVIEW TO CALCULATE THE COEFFICIENT OF CORRELATION r

x	y	x^2	y^2	xy
2	3	4	9	6
4	4	16	16	16
6	7	36	49	42
8	6	64	36	48
10	9	100	81	90
Σx	Σy	Σx^2	Σy^2	Σxy
30	29	220	191	202



$-1 \leq r \leq 1$

$$r = \frac{n\Sigma xy - \Sigma x \Sigma y}{\sqrt{\left[n\Sigma x^2 - (\Sigma x)^2\right]\left[n\Sigma y^2 - (\Sigma y)^2\right]}}$$

$$= \frac{5 * 202 - 30 * 29}{\sqrt{\left[5 * 220 - 30^2\right]\left[5 * 191 - 29^2\right]}}$$

$$= .927$$

$$r = \frac{SS_{xy}}{\sqrt{SS_{xx} \cdot SS_{yy}}}$$

$$SS_{xy} = \Sigma xy - \frac{\Sigma x \Sigma y}{n}$$

$$SS_{xx} = \Sigma x^2 - \frac{(\Sigma x)^2}{n}$$

$$SS_{yy} = \Sigma y^2 - \frac{(\Sigma y)^2}{n}$$