

Actividades 4ta unidad Lección 4 Semana 31
entregar en plataforma.

a)

X	Y	$(x - \bar{x})$	$(y - \bar{y})$	$(x - \bar{x})(y - \bar{y})$	$(x - \bar{x})^2$	$(y - \bar{y})^2$
9	8	2.5	0.17	0.425	6.25	0.0289
8	7	1.5	-0.83	-1.245	2.25	0.6889
7	8	0.5	0.17	0.085	0.25	0.0289
6	10	-0.5	2.17	-1.085	0.25	4.7089
5	8	-1.5	0.17	-0.255	2.25	0.0289
4	6	-2.5	-1.83	4.575	6.25	3.3489
39	47			2.5	17.5	8.8334

$$\bar{x} = \frac{39}{6} = 6.5$$

$$\bar{y} = \frac{47}{6} = 7.83$$

$$S_x = \frac{17.5}{6-1} = \frac{17.5}{5} = 3.5$$

$$S_y = \frac{8.83}{6-1} = \frac{8.83}{5} = 1.766 \sim 1.77$$

$$r = \frac{2.5}{\sqrt{(5)(3.5)(1.77)}} = \frac{2.5}{\sqrt{30.975}} = 0.08$$

COEFICIENTE CORRELATIVO $r = 0.08$

Actividades de unidades (sección 4) semana 21
 entregar en plataforma

$$C_d = r^2$$

$$C_d = (0.08)^2$$

$$C_d = 6.4 \times 10^{-3}$$

$$C_d = 0.64\%$$

Coefficient de correlacion

0.08

Coefficiente de determinacion

0.64%

b)

$$\sum y = 60$$

X	Y	(X - $\bar{X}$)	(Y - $\bar{Y}$)	(X - $\bar{X}$)(Y - $\bar{Y}$)	(X - $\bar{X}$) ²	(Y - $\bar{Y}$) ²
3	4	-1.75	-5.25	9.1875	3.0625	27.5625
4	10	-0.75	0.75	-0.5625	0.5625	0.5625
5	11	0.25	1.75	0.4375	0.0625	3.0625
7	12	2.25	2.75	6.1875	5.0625	7.5625
19	37			15.25	8.75	38.75

$$\bar{X} = \frac{19}{4} = 4.75$$

$$\bar{Y} = \frac{37}{4} = 9.25$$

$$S_x = \frac{8.75}{4-1} = \frac{8.75}{3} = 2.92$$

$$S_y = \frac{38.75}{4-1} = \frac{38.75}{3} = 12.92$$

$$r = \frac{15.25}{\sqrt{(3)(2.92)(12.92)}} = \frac{15.25}{\sqrt{113.18}} = 0.13$$

COEFICIENTE CORRELATIVO $r = 0.13$

$$cd = r^2$$

$$cd = (0.13)^2$$

$$cd = 0.0169 \times 100$$

$$cd = 1.69\%$$

Coefficiente de correlación

Coefficiente de determinación

0.13

1.69