



**Mi Universidad**

## **Ejercicios**

*Nombre del Alumno: Karla Sayuri García Hernández*

*Nombre del tema: estadístico de forma de la distribución*

*Parcial : 3*

*Nombre de la Materia: Estadística descriptiva*

*Nombre del profesor: Jorge Enrique Albores Aguilar*

*Nombre de la Licenciatura: Psicología*

*Cuatrimestre: 2*

ACTIVIDAD 1  
Karla Sayuri García Hernández

| x   | y       | xy     | x <sup>2</sup> | y <sup>2</sup> |
|-----|---------|--------|----------------|----------------|
| 1   | 1400    | 1400   | 1              | 1960000        |
| 2   | 1430    | 2860   | 4              | 2044900        |
| 3   | 1500    | 4500   | 9              | 2250000        |
| 4   | 1490    | 5960   | 16             | 2220100        |
| 5   | 1520    | 7600   | 25             | 2310400        |
| 6   | 1550    | 9300   | 36             | 2402500        |
| 7   | 1570    | 10990  | 49             | 2464900        |
| 8   | 1600    | 12800  | 64             | 2560000        |
| 9   | 1610    | 14490  | 81             | 2592100        |
| 10  | 1720    | 17200  | 100            | 2958400        |
| 11  | 1710    | 18810  | 121            | 2924100        |
| 12  | 1750    | 21000  | 144            | 3062500        |
| 6.5 | 1570.83 | 126910 | 650            |                |

$$* B_1 = \frac{\sum xy - n\bar{x}\bar{y}}{\sum x^2 - n\bar{x}^2}$$

$$B_1 = \frac{126910 - 12(6.5)(1570.83)}{650 - 12(6.5)^2} = 30.6661$$

$$* B_0 = \bar{y} - b_1\bar{x}$$

$$B_0 = 1570.83 - (30.6661 \times 6.5) = 1383.76$$

$$* y = B_0 + B_1x$$

$$y = 1383.76 + (30.6661)(13) = 1782.4193$$

$$y = 1383.76 + (30.6661)(14) = 1813.0854$$

$$y = 1383.76 + (30.6661)(15) = 1843.7515$$

$$y = 1383.76 + (30.6661)(16) = 1874.4176$$

Actividad 2  
Karla Sayuri Garcia Hernandez

| x   | y      | xy     | x <sup>2</sup> | y <sup>2</sup> |
|-----|--------|--------|----------------|----------------|
| 1   | 1430   | 1430   | 1              | 2044900        |
| 2   | 1400   | 2800   | 4              | 1960000        |
| 3   | 1460   | 4380   | 9              | 2131600        |
| 4   | 1465   | 5860   | 16             | 2146225        |
| 5   | 1470   | 7350   | 25             | 2160900        |
| 6   | 1500   | 9000   | 36             | 2250000        |
| 7   | 1510   | 10570  | 49             | 2280100        |
| 8   | 1550   | 12400  | 64             | 2402500        |
| 9   | 1575   | 14175  | 81             | 2480625        |
| 10  | 1600   | 16000  | 100            | 2560000        |
| 11  | 1615   | 17765  | 121            | 2608225        |
| 12  | 1650   | 19800  | 144            | 2722500        |
| 13  | 1670   | 21710  | 169            | 2788900        |
| 14  | 1700   | 23800  | 196            | 2890000        |
| 7.5 | 1542.5 | 167040 | 1015           |                |

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$$* B_1 = \frac{\sum xy - n\bar{x}\bar{y}}{\sum x^2 - n\bar{x}^2}$$

$$B_1 = \frac{167040 - 14(7.5)(1542.5)}{1015 - 14(7.5)^2} = 22.3186$$

$$* B_0 = \bar{y} - b_1\bar{x}$$

$$B_0 = 1542.5 - (22.3186 \times 7.5) = 1375.1105$$

$$* y = B_0 + B_1x$$

$$y = 1375.1105 + (22.3186)(15) = 1709.8895$$

$$y = 1375.1105 + (22.3186)(16) = 1732.2081$$

$$y = 1375.1105 + (22.3186)(17) = 1754.5267$$

$$y = 1375.1105 + (22.3186)(18) = 1776.8453$$

