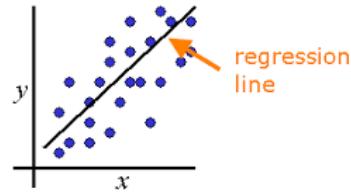


Finding Equation of Regression Line

Let's say, you have coordinates of four points:

| | | | | |
|---|----|----|----|----|
| X | 2 | 4 | 6 | 8 |
| Y | Y1 | Y2 | Y3 | Y4 |



For y_1, y_2, y_3, y_4 assign any four positive numbers between 10 and 30. Make sure your set is different from already posted submissions.

Here are 6 steps you should to complete:

- 1) Compute x-mean $\langle x \rangle$ and y-mean $\langle y \rangle$.
- 2) Complete the table below:

| x | y | $x - \langle x \rangle$ | $y - \langle y \rangle$ | $(x - \langle x \rangle)(y - \langle y \rangle)$ | $(x - \langle x \rangle)^2$ |
|---|---|-------------------------|-------------------------|--|-----------------------------|
| 2 | | | | | |
| 4 | | | | | |
| 6 | | | | | |
| 8 | | | | | |

- 3) Find Sum of column $(x - \langle x \rangle)(y - \langle y \rangle)$. This is S_{xy}
- 4) Find Sum of column $(x - \langle x \rangle)^2$ This is S_{xx}
- 5) Calculate $b_1 = S_{xy} / S_{xx}$ and $b_0 = \langle y \rangle - b_1 \langle x \rangle$
- 6) Write Equation of Regression Line in form: $y = b_0 + b_1 x$