

22S:25 HW Supplement 3 - S '12 Name _____ Sec _____
Chapter 8 – Correlation coefficient, SD line

Years of service (x) and salary in thousands of dollars (y) were noted for the 5 junior ACME employees (less than 8 years of service). The data is as follows:

	years of service	salary in thousands
Amy	1	30
Bob	4	36
Carol	3	39
Donna	7	42
Eric	5	48

1. Using the space below problem (4), draw a **scatterplot** for the data. Label the numerical scales used on the axes.
2. Using the method shown in class, calculate the correlation coefficient (r). Show the work in the space near the data. $r = \underline{\hspace{2cm}}$ (fill in)
3. The SD line goes through the point of averages ($\underline{\hspace{1cm}}$, $\underline{\hspace{1cm}}$) and has slope = $\underline{\hspace{2cm}}$ (fill in)
4. Draw the **SD line** on the scatterplot. Use a straight edge. Label the point of averages and the slope.

