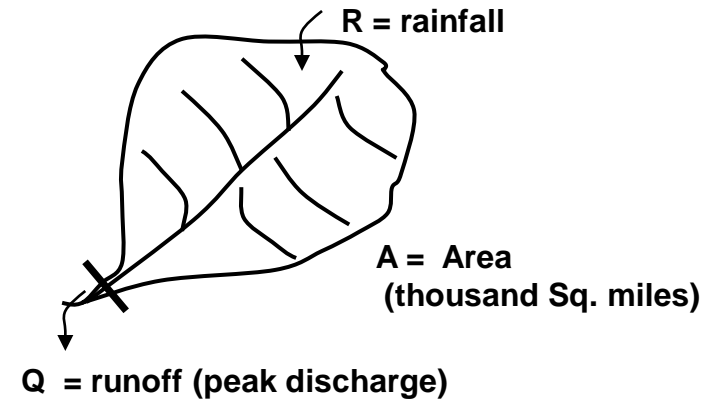


Example Problem

- Find correlation between A & Q

	Q	A	(Q- \bar{Q})	(A- \bar{A})	(Q- \bar{Q})(A- \bar{A})
	15.5	1.25	-6.223	-0.271	1.686
	8.5	0.871	-13.223	-0.650	8.593
	85	5.69	63.277	4.169	263.811
	105	8.27	83.277	6.749	562.049
	24.8	1.62	3.077	0.099	0.305
	3.8	0.175	-17.923	-1.346	24.122
	1.76	0.148	-19.963	-1.373	27.406
	18.00	1.40	-3.723	-0.121	0.450
	8.75	0.257	-12.973	-1.264	16.396
	8.25	0.322	-13.473	-1.199	16.152
	3.56	0.178	-18.163	-1.343	24.390
	1.90	0.148	-19.823	-1.373	27.214
	16.50	0.872	-5.223	-0.649	3.389
	2.80	0.091	-18.923	-1.430	27.057
Mean	21.723	1.521			
Sum					1003.020
σ	32.050	2.423			



$$S_{x,y} = \frac{\sum (x - \bar{x})(y - \bar{y})}{(n - 1)} = \frac{1003.020}{(14 - 1)} = 77.115$$

$$r_{x,y} = \frac{S_{x,y}}{S_x S_y} = \frac{77.115}{(32.05 \times 2.423)} = 0.994$$

(strongly correlated)