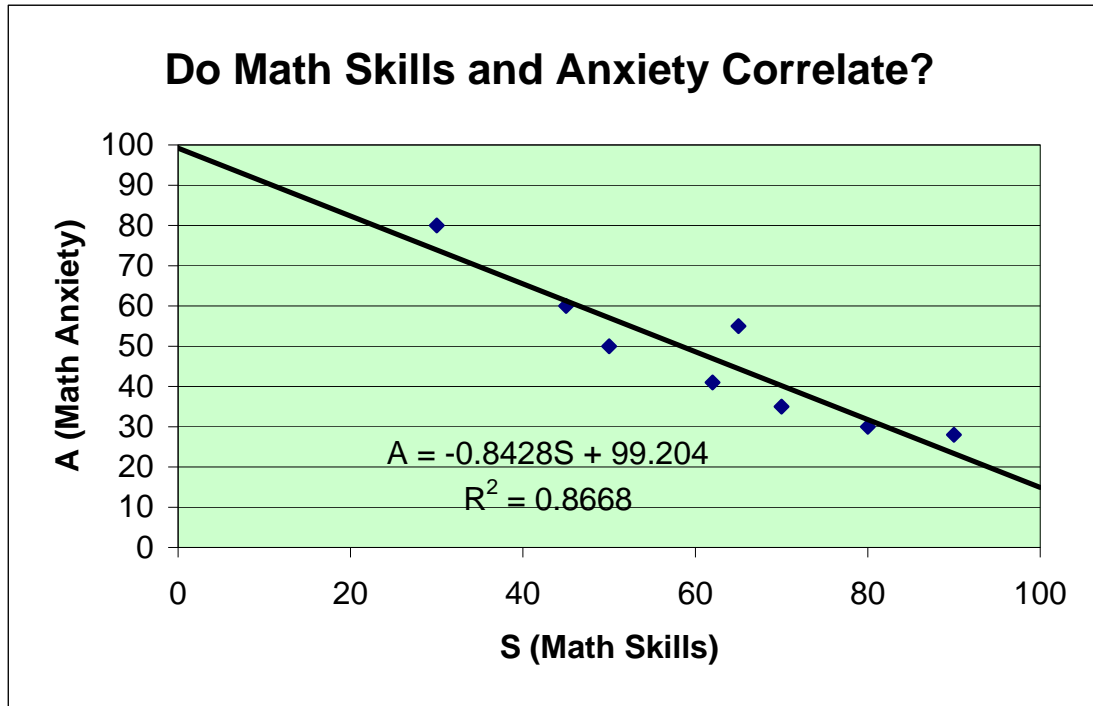


ANOVA (Analysis of Variance)

	Student	1	2	3	4	5	6	7	8
S (Math Skills)		70	80	62	90	45	30	65	50
A (Math Anxiety)		35	30	41	28	60	80	55	50



What is R^2 ?

	1	2	3	4	5	6	7	8
Y^* (Y Mean)	47.375							
$Y_i - Y^*$ (Y Deviations)	-12.375	-17.375	-6.375	-19.375	12.625	32.625	7.625	2.625
$(Y_i - Y^*)^2$ (Square Deviations)	153.141	301.891	40.6406	375.391	159.391	1064.39	58.1406	6.89063
SS_{YY^*} (Total Y Variance)	2159.875							
Y_i' (Predicted Y Values)	40.208	31.78	46.9504	23.352	61.278	73.92	44.422	57.064
$Y_i' - Y_i$ (Y Residuals)	5.208	1.78	5.9504	-4.648	1.278	-6.08	-10.578	7.064
$(Y_i' - Y_i)^2$ (Square Residuals)	27.1233	3.1684	35.4073	21.6039	1.63328	36.9664	111.894	49.9001
SS_{Y-Y} (Total Residual Y Variance)	287.6966922							
SS_{Y-Y}/SS_{YY^*} (Fraction of Unexplained Variance)	0.133200621							
$R^2 = 1 - SS_{Y-Y}/SS_{YY^*}$	0.866799379							

Conclusion: 87% of math anxiety is "explained" by the student's level of math skills.