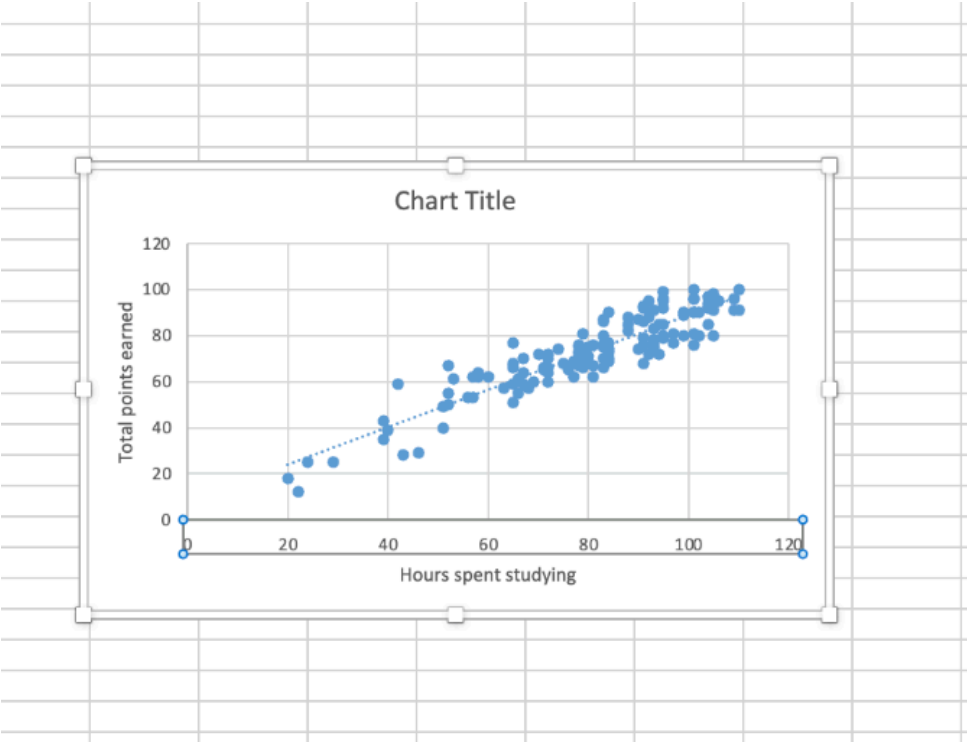

a. Estimated regression model: **y = 0.8125x + 7.6779**

b. Both the regression parameters B0 and B1 are not equal to zero at a 0.01 level of significance. B0 (7.6779) represents the expected value of total points earned when hours spent studying is 0. B1 (0.8125) represents the change in total points earned for each additional hour spent studying. These interpretations are reasonable.

c.

SUMMARY OUTPUT								
Regression Statistics								
Multiple R	0.915097							
R Square	0.837403							
Adjusted R	0.836198							
Standard Ei	7.125549							
Observatio	137							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	1	35301.32	35301.32	695.2713	4.21E-55			
Residual	135	6854.416	50.77345					
Total	136	42155.74						
	Coefficient	Standard Ei	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0	Upper 95.0%
Intercept	7.677882	2.549417	3.011623	0.003103	2.63592	12.71984	2.63592	12.71984
Hours Spen	0.812495	0.030814	26.368	4.21E-55	0.751555	0.873435	0.751555	0.873435

R^2 = 0.8374

The model in part a explains about **83.73% of the variation** in sample values.

d. Mark spends 85 hours studying.
   y = 0.8125(85) + 7.6779 = 76.74
   He is predicted to have earned **76.74 points**.