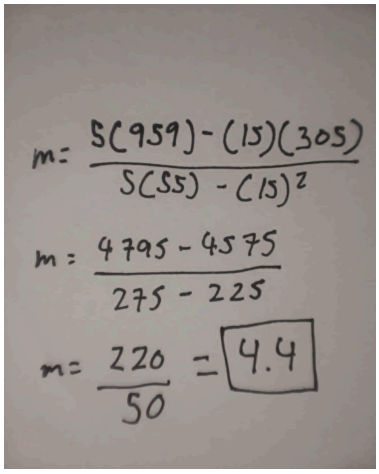
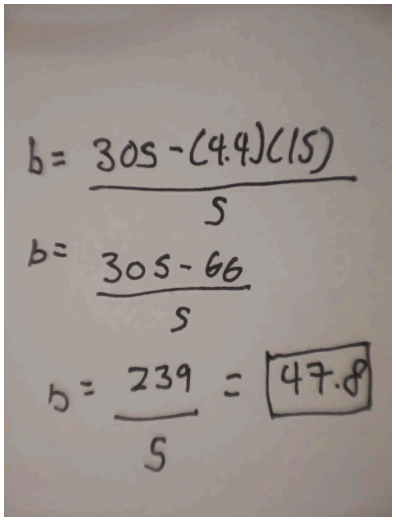
1. **Find the table**

Student	x (Hours Studied)	y (Exam Score)	x2	xy
1	1	52	1	52
2	2	57	4	114
3	3	61	9	183
4	4	65	16	260
5	5	70	25	350
	Ex = 15	**Ey = 305**	**Ex2 = 55**	**Exy = 959**

2. **Compute the slope m**

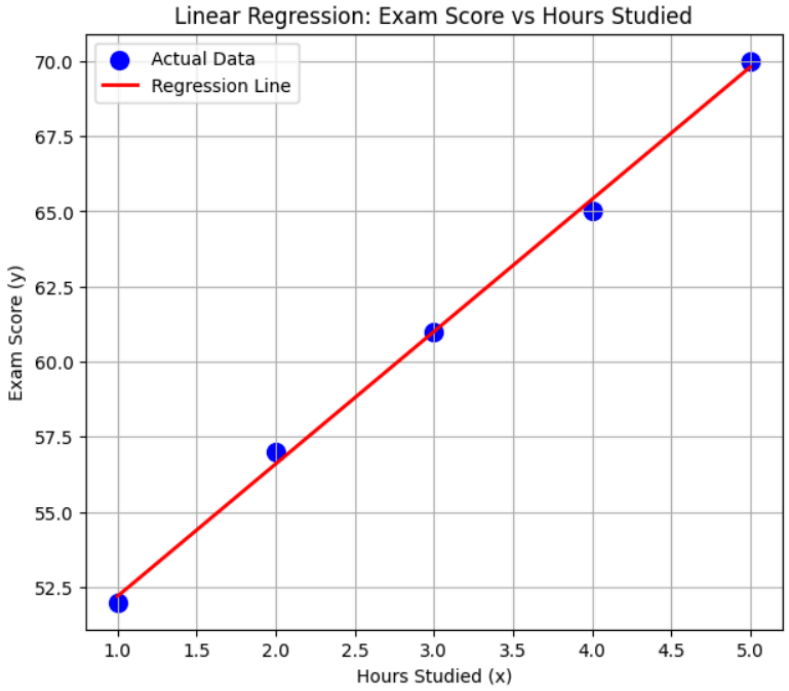


3. **Compute the intercept b**



4. **Regression equation**
   y = 4.4x + 47.8

5. **Draw the regression line using scatter plot**



Student	Hours Studied (x)	Exam Score (y)	Predicted Score (y_pred)
1	1	52	**52.2**
2	2	57	**56.6**
3	3	61	**61.0**
4	4	65	**65.4**
5	5	70	**69.8**

6. **Calculate the sum of squared errors (SSE)**

Student	y	ypred	y - ypred	(y - ypred)^2
1	52	52.2	-0.2	0.04
2	57	56.6	0.4	0.16
3	61	61.0	0.0	0.00
4	65	65.4	-0.4	0.16
5	70	69.8	0.2	0.04

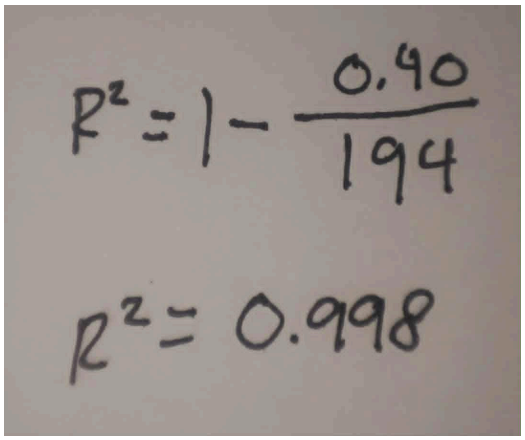
SSE = 0.04 + 0.16 + 0 + 0.16 + 0.04 = ***0.40***

7. **Calculate the sum of squared total (SST)**

Student	x	y	Mean = 61	y − y	(y − y)^2
1	1	52	**61**	**-9**	**81**
2	2	57	**61**	**-4**	**16**
3	3	61	**61**	**0**	**0**
4	4	65	**61**	**4**	**16**
5	5	70	**61**	**9**	**81**

SST = 81 + 16 + 0 + 16 + 81 = ***194***

8. **Compute R^2**



9. **Prediction**

y = 4.4(6) + 47.8 = 26.4 + 47.8 = 74.2

Da predicted exam score iz = ***74.2***