

# Linear Regression

The chart below shows the amount of time a student spent studying and the test score the student received based off of that study time.

Time in minutes spent studying	Score received	Predicted Value	Residual
15	71		
35	80		
42	83		
58	88		
60	90		
75	94		

1.) Can this data be modeled using a linear equation? \_\_\_\_\_

2.) If so, what is the linear regression line (line of best fit)? \_\_\_\_\_

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3.) What type of correlation does the data depict? \_\_\_\_\_

4.) Interpret the slope in the context of the problem.

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5.) Interpret the y-intercept in the context of the problem.

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6.) If this student studies for 45 minutes, what is his predicted score? \_\_\_\_\_

7.) If this student wants to score a perfect 100%, how much time must he spend studying?

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