

(d) Approximate how many people will attend the 16th game of the season. Is this an example of extrapolation? If, so does the prediction seem reasonable?

(c) Approximate how many people attended the 3rd game of the season.

(a) Approximate the equation of the line of best fit, rounding to two decimal places when needed.
 (b) Approximate the correlation coefficient, rounding to four decimal places. Describe the correlation.

x	1	2	4	5	7
y	722	763	826	815	897

Example 2

Approximating and using the line of best fit

(d) Approximate the average class score on the chapter 14 test. Is this an example of extrapolation? If, so does the prediction seem reasonable?

(c) Approximate the average class score on the chapter 5 test.

(a) Approximate the equation of the line of best fit, rounding to two decimal places when needed.
 (b) Approximate the correlation coefficient, rounding to four decimal places. Describe the correlation.

x	1	2	3	4	6
y	84	83	86	88	90

The table gives the average class score (y) on each chapter test for the first six chapters (x) of the algebra textbook.

Example 3

Approximating and using the line of best fit

Calculator steps to find the line of best fit:

2nd, +, 7, 1, 2 (clear RAM)

2nd, +, 7, 2, 2 (set Defaults)

2nd, 0, "Diagnostic On", enter

STAT, Edit, x's in L1, y's in L2

2nd, MODE

STAT, Calc, LinReg(ax+b)

Round to two decimals



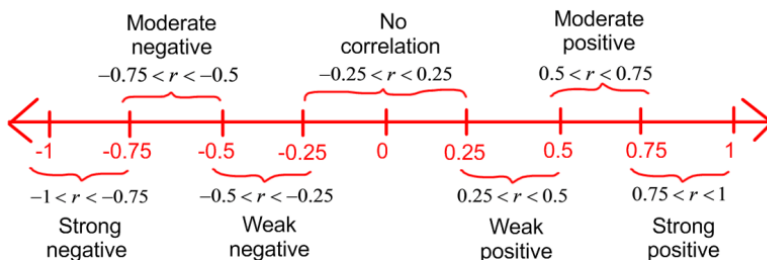
Linear Regression

Correlation:

Correlation coefficient:

Extrapolation:

Negative if the points trend downward **Correlation coefficient (r)** Positive if the points trend upward



Example 1

Describe the correlation

