

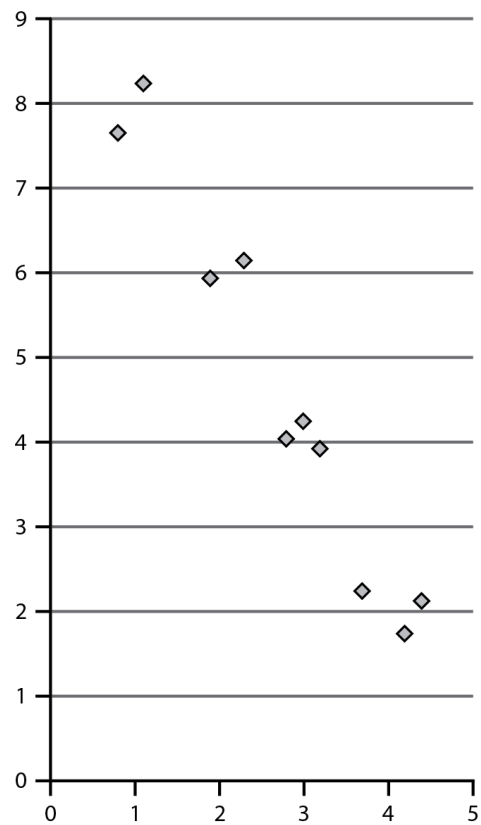
INTERPRETING FUNCTIONS DRILL

Are the following functions linear, quadratic, or exponential?

$y = 2x^2 - 5$

$y = 4x + 2$

$y = 6^x + 5$



Consider the scatter plot above. When rounded to the nearest whole number, what is the slope of the line of best fit for this scatter plot?

	Seniors Graduating With Honors	Seniors Graduating Without Honors	Total
Lincoln High School	50	240	290
Jefferson High School	80	170	250
Total	130	410	540

Consider the table above.

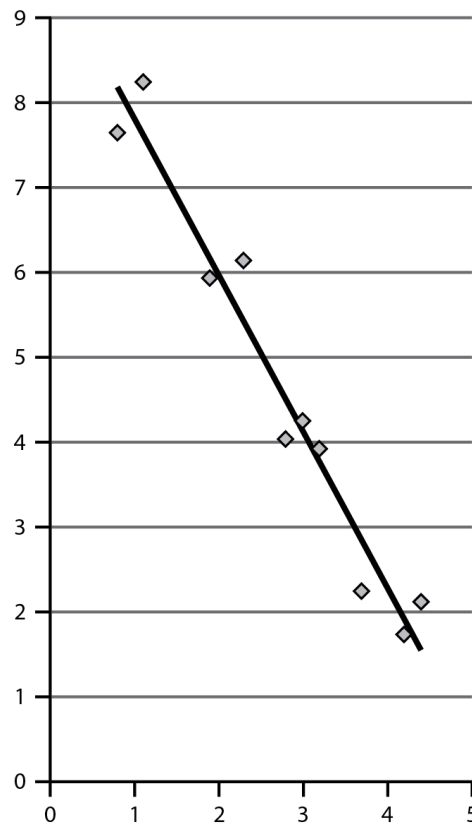
- How many seniors are graduating from Jefferson High School without honors?
- How many seniors are at both schools?
- How many seniors are at just Lincoln High School?

$y=2x^2-5$  is a quadratic function since the  $x$  is raised to the second power.

$y=4x+2$  is a linear function since it has a constant slope of 4.

$y=6^x+5$  is an exponential function since the 6 is raised to the  $x$  power.

To estimate the slope, sketch a best-fit line:



The line roughly has points at  $(1, 8)$  and  $(3, 4)$ . So the slope would approximately be:

$$\frac{(y_2 - y_1)}{(x_2 - x_1)}$$

$$\frac{8-4}{1-3} =$$

$$\frac{4}{-2} = -2$$

170

540. Include seniors from both schools, both those who are graduating with honors and those who are graduating without honors.

290. Include only seniors from Lincoln, both those who are graduating with honors and those who are graduating without honors.

## PSAT Resource Links

**PSAT Online Practice Tests:** <https://www.crackpsat.net/psat/>

❖ PSAT Reading Practice Tests:

<https://www.crackpsat.net/psat/reading/>

❖ PSAT Writing and Language Tests:

<https://www.crackpsat.net/psat/writing-language/>

❖ PSAT Math Practice Tests:

<https://www.crackpsat.net/psat/math/>

**PSAT Real Past Papers Download:**

<https://www.crackpsat.net/psat-downloads/>

**New SAT Practice Tests:**

<https://www.cracksat.net>

**ACT Practice Tests:**

<https://www.crackacc.com>

**AP Exams Practice Tests:**

<https://www.crackap.com>

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