

Interpreting Regression Lines & r-Values

Each description on the left is written about the linear regression findings on the right. Fill in the blanks using the information in the line of best fit and the r-value.

1	<p>For every additional Marvel Universe movie released each year, the average person is predicted to consume <u>3.19</u> <u>fewer</u> pounds of sugar!</p> <p style="text-align: center;">[amount] [more / fewer]</p> <p>This correlation is <u>non-existent</u>.</p> <p style="text-align: center;">[strong, moderate, weak, non-existent]</p>	$y = -3.19x + 12$ $r = -0.05$
2	<p>Shoe size and height are <u>strongly</u>,</p> <p style="text-align: center;">[strongly, moderately, weakly, not]</p> <p><u>positively</u> correlated. If person A is one size bigger than person B, we predict that they will be roughly <u>1.65</u> inches taller than person B as well.</p> <p style="text-align: center;">[positively / negatively] [amount]</p>	$y = 1.65x + 52$ $r = 0.89$
3	<p>There is <u>no</u> relationship found between the number of Uber drivers in a city and the number of babies born each year.</p> <p style="text-align: center;">[a strong, a moderate, no]</p>	$y = 0.012x + 7.8$ $r = 0.01$
4	<p>The correlation between weeks-of-school-missed and SAT score is <u>moderate</u> and <u>negative</u>. For every week a student misses, we predict a <u>15.3</u> point <u>drop</u> in their SAT score.</p> <p style="text-align: center;">[strong, moderate, weak, non-existent] [positive / negative] [amount] [gain / drop]</p>	$y = -15.3x + 1150$ $r = -0.65$
5	<p>There is a <u>weak</u>, <u>positive</u> correlation between the number of streaming video services someone has, and how much they weigh. For each service, we expect them to be roughly <u>1.6</u> pounds heavier.</p> <p style="text-align: center;">[strong, moderate, weak, non-existent] [positive / negative] [amount]</p>	$y = 1.6x + 160$ $r = 0.12$