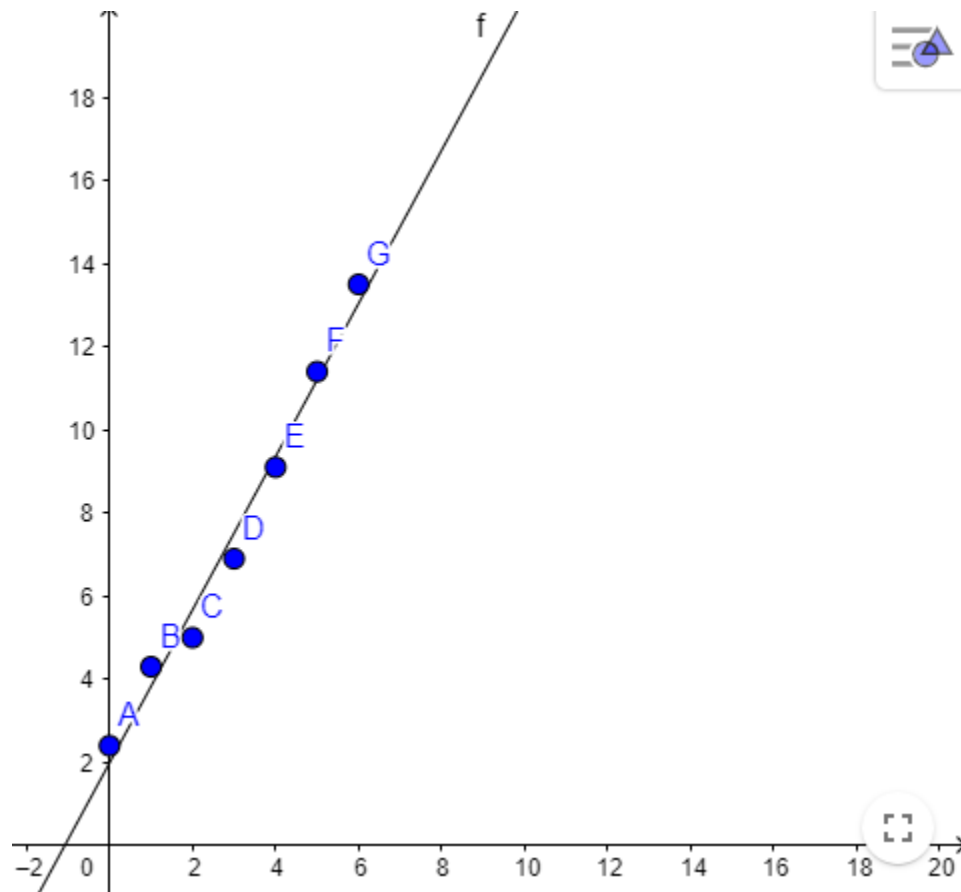


Cody Morgan
James Volz

1.



2. Positive correlation

3. $1.84x + 1.99$

$$\frac{\sum y \cdot \sum x^2 - \sum x \cdot \sum xy}{n(\sum x^2 - (\sum x)^2)} = \frac{52.6 \cdot 91 - 21 \cdot 209.4}{7 \cdot 91 - 21 \cdot 21} \approx 1.99$$

$$\frac{n(\sum xy) - \sum x \cdot \sum y}{n(\sum x^2 - (\sum x)^2)} = \frac{7 \cdot 209.4 - 21 \cdot 52.6}{7 \cdot 91 - 21 \cdot 21} \approx 1.84$$

4a. 8.43 $1.84(3.5) + 1.99$

4b. 16.71 $1.84(8.0) + 1.99$