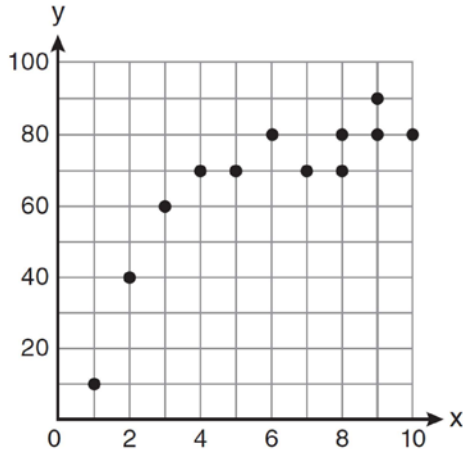


**S.ID.B.6: Regression 7**

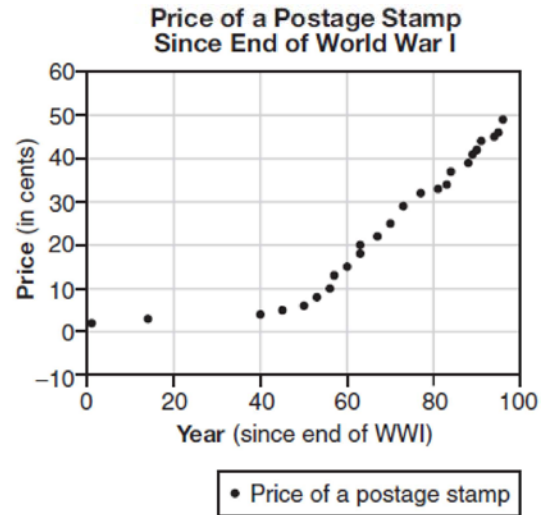
- 1 Samantha constructs the scatter plot below from a set of data.



Based on her scatter plot, which regression model would be most appropriate?

- 1) exponential
- 2) linear
- 3) logarithmic
- 4) power

- 2 The price of a postage stamp in the years since the end of World War I is shown in the scatterplot below.



The equation that best models the price, in cents, of a postage stamp based on these data is

- 1)  $y = 0.59x - 14.82$
- 2)  $y = 1.04(1.43)^x$
- 3)  $y = 1.43(1.04)^x$
- 4)  $y = 24 \sin(14x) + 25$

**S.ID.B.6: Regression 7**

**Answer Section**

1 ANS: 3 REF: 061127a2

2 ANS: 3

The pattern suggests an exponential pattern, not linear or sinusoidal. A 4% growth rate is accurate, while a 43% growth rate is not.

REF: 011713aii