

Answer on Question #55817 – Math – Algebra

3. In the function $y + 3 = (2x)^2 + 1$, what effect does the number 2 have on the graph, as compared to the graph of $y = x^2$

- A: It stretches the graph horizontally by a factor of 2
- B: It shrinks the graph vertically to $\frac{1}{2}$ the original height.
- C: It stretches the graph vertically by a factor of 2
- D: It shrinks the graph horizontally to $\frac{1}{2}$ the original width.

Answer: D: It shrinks the graph horizontally to $\frac{1}{2}$ the original width.

4. Which of the following describes the non-rigid transformation in the function shown below?

$$Y + 5 = -2(x - 1)^2$$

- A: A graph is shifted 1 unit right
- B: A graph is shifted 5 units down
- C: A graph is reflected across the x-axis
- D: A graph is stretched vertically by a factor of 2.

Answer: D: A graph is stretched vertically by a factor of 2.