

Mathematical Message

Enigma n°12

2nd December 2022

Consider the following sets:

- $\{(x, y) \mid -3 \leq x \leq -2 \text{ and } y = |2x + 5|\}$
- $\{(x, y) \mid -3 \leq x \leq -2 \text{ and } y = -|2x + 5|\}$
- $\{(x, y) \mid x = -1.5 \text{ and } -1 \leq y \leq 1\}$
- $\{(x, y) \mid -1.5 \leq x \leq -0.5 \text{ and } y = |2x + 2|\}$
- $\{(x, y) \mid x = -0.5 \text{ and } -1 \leq y \leq 1\}$
- $\{(x, y) \mid 0 \leq x \leq 1 \text{ and } y = -|4x - 2| + 1\}$
- $\{(x, y) \mid 0.25 \leq x \leq 0.75 \text{ and } y = 0\}$
- $\{(x, y) \mid 0 \leq x \leq 1 \text{ and } y = -|4x - 2| + 1\}$
- $\{(x, y) \mid 0.25 \leq x \leq 0.75 \text{ and } y = 0\}$
- $\left\{(x, y) \mid 1.5 \leq x \leq 2.5 \text{ and } y = \frac{\sqrt{x-1.5}}{2} + 0.5\right\}$
- $\left\{(x, y) \mid 1.5 \leq x \leq 2.5 \text{ and } y = -\frac{\sqrt{-x+2.5}}{2} - 0.5\right\}$
- $\left\{(x, y) \mid 1.5 \leq x \leq 2.5 \text{ and } \frac{\arcsin(-2x+4)}{\pi}\right\}$

What is the word hidden behind the above sets?