



# V. Модуль и графики

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# Определение модуля

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Модуль действительного числа  $a$  - это неотрицательное число (обозначается  $|a|$ ), определяемое так: если  $a \geq 0$ , то  $|a| = a$ , если  $a < 0$ , то  $|a| = -a$ .

Например:

$$|3| = 3; \quad |0| = 0;$$

$$|-5| = -(-5) = 5.$$

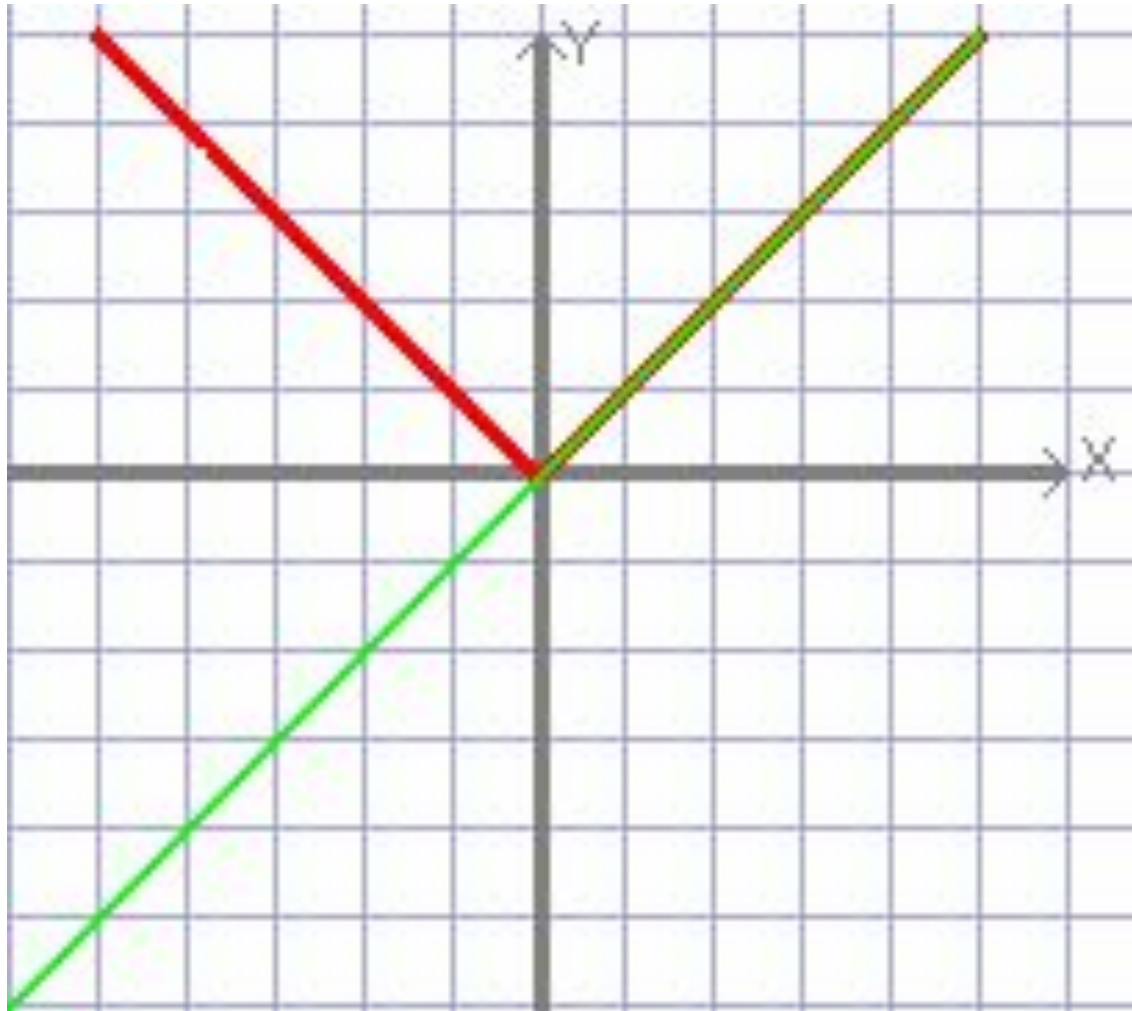


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$$|x| = \begin{cases} x, & \text{если } x \geq 0 \\ -x, & \text{если } x < 0 \end{cases}$$

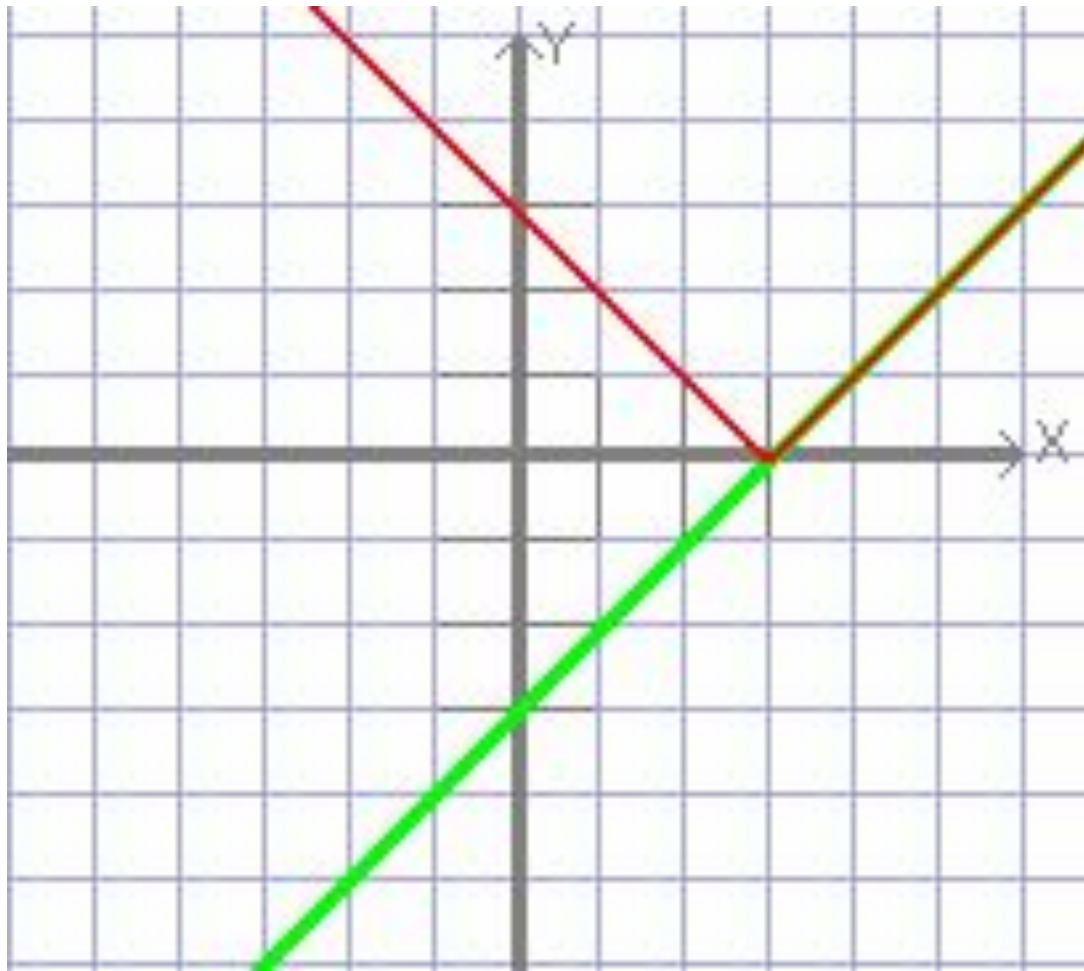
$$y = |x|$$

$$y = x$$



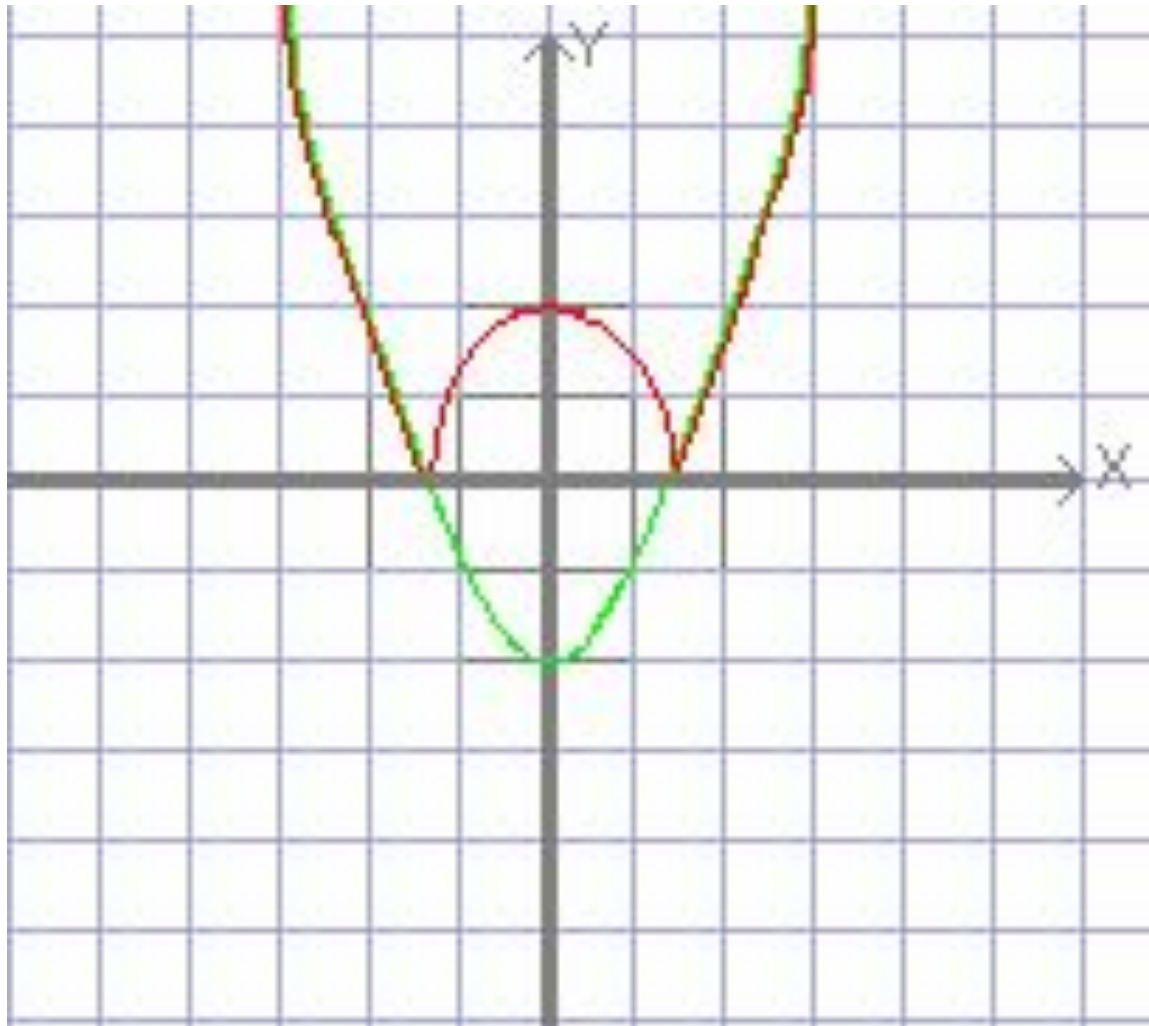
$$y = |x - 3|$$

$$y = x - 3$$



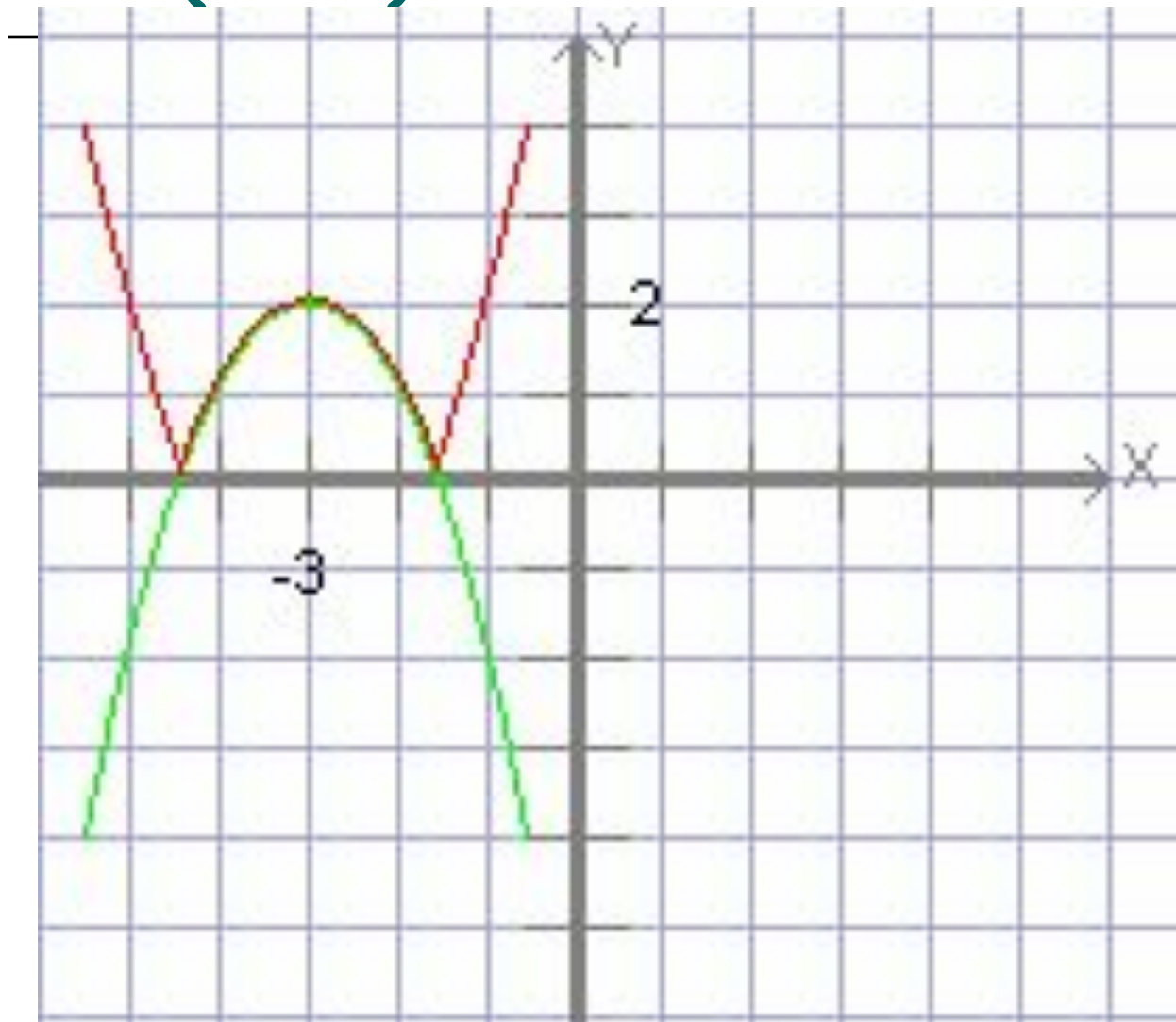
$$y = |x^2 - 2|$$

$$y = x^2 - 2$$



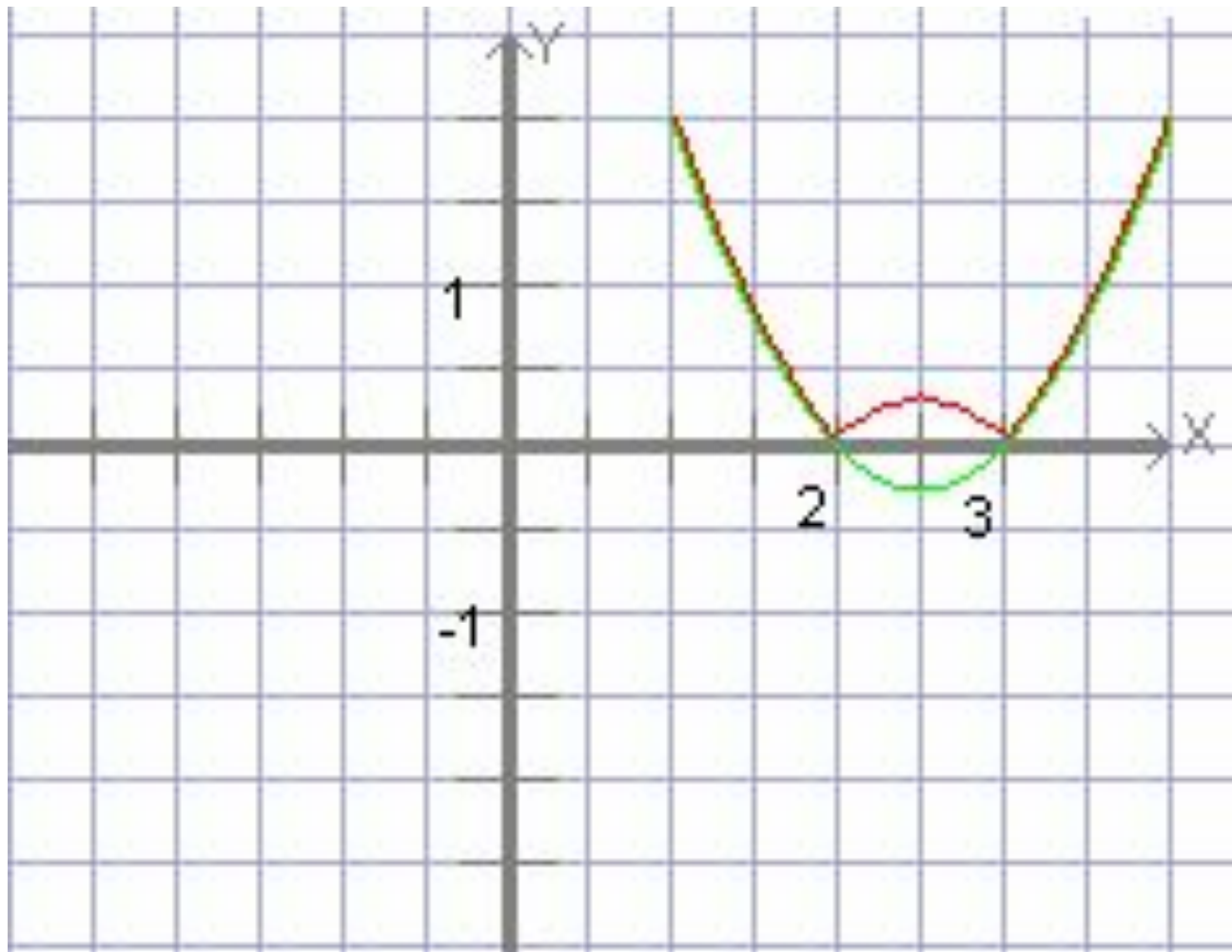
$$Y = -(X+3)^2 + 2$$

$$Y = |-(X+3)^2 + 2|$$



$$Y = X^2 - 5X + 6$$

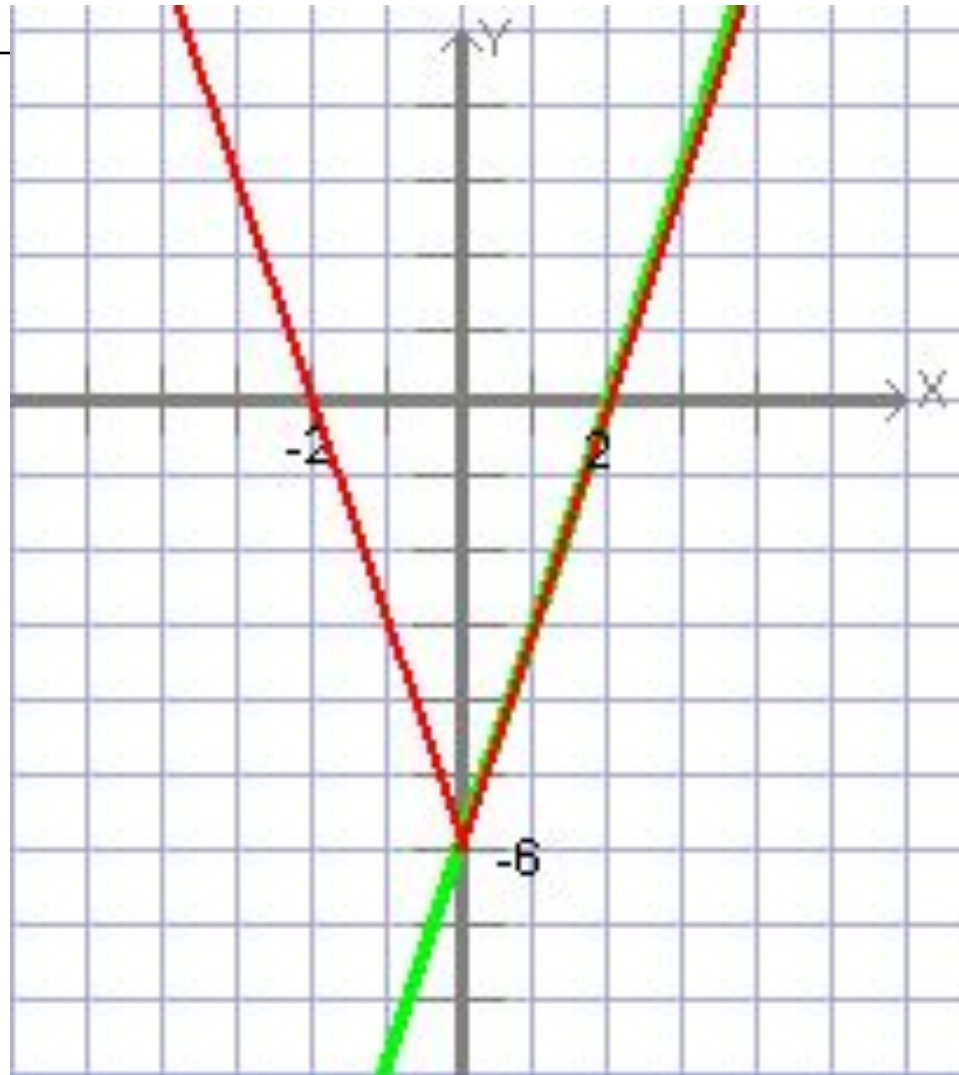
$$Y = |X^2 - 5X + 6|$$





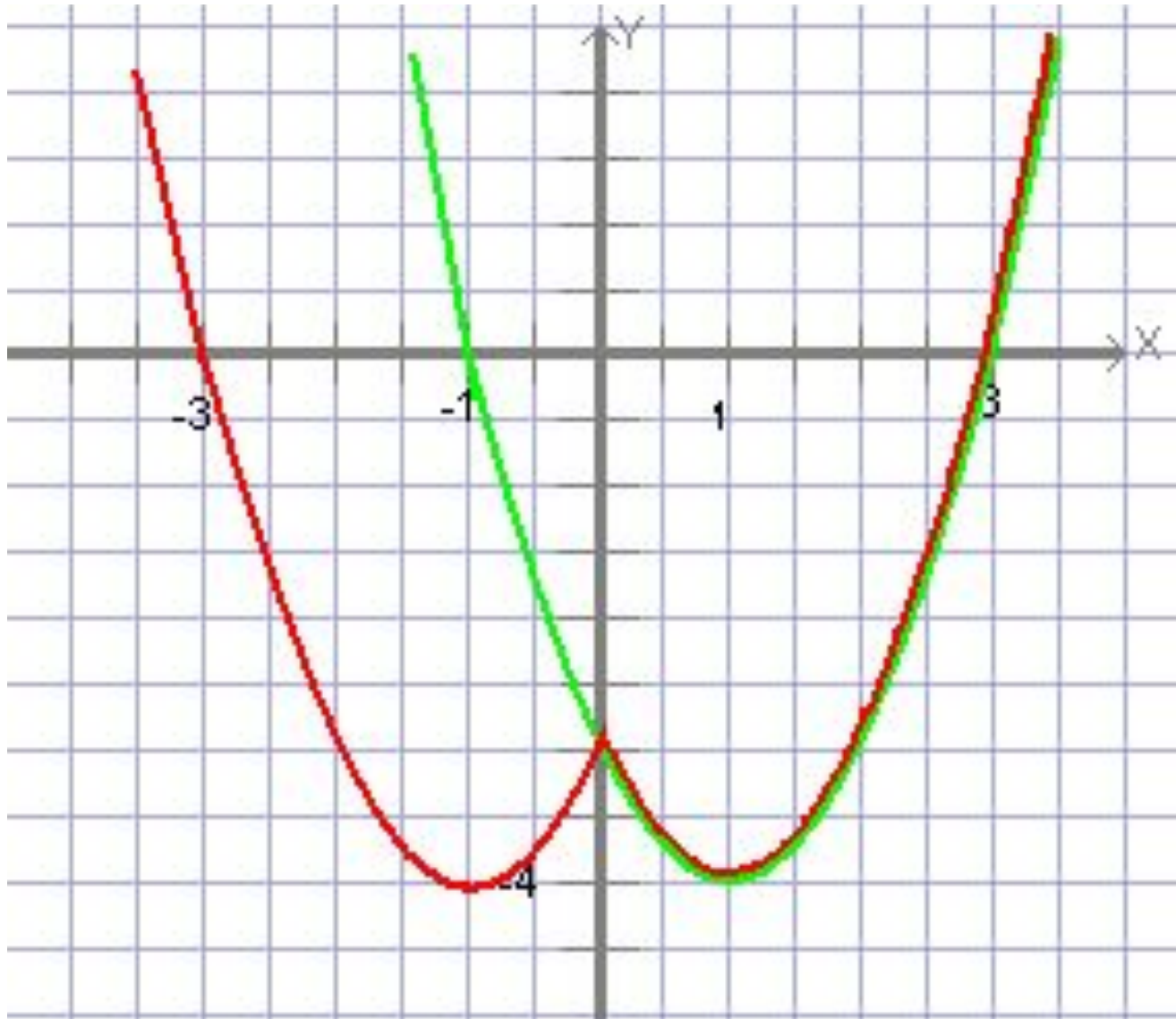
$$Y=3X-6$$

$$Y=3|X|-6$$



$$Y=X^2-2X-3$$

$$Y=X^2-2|X|-3$$



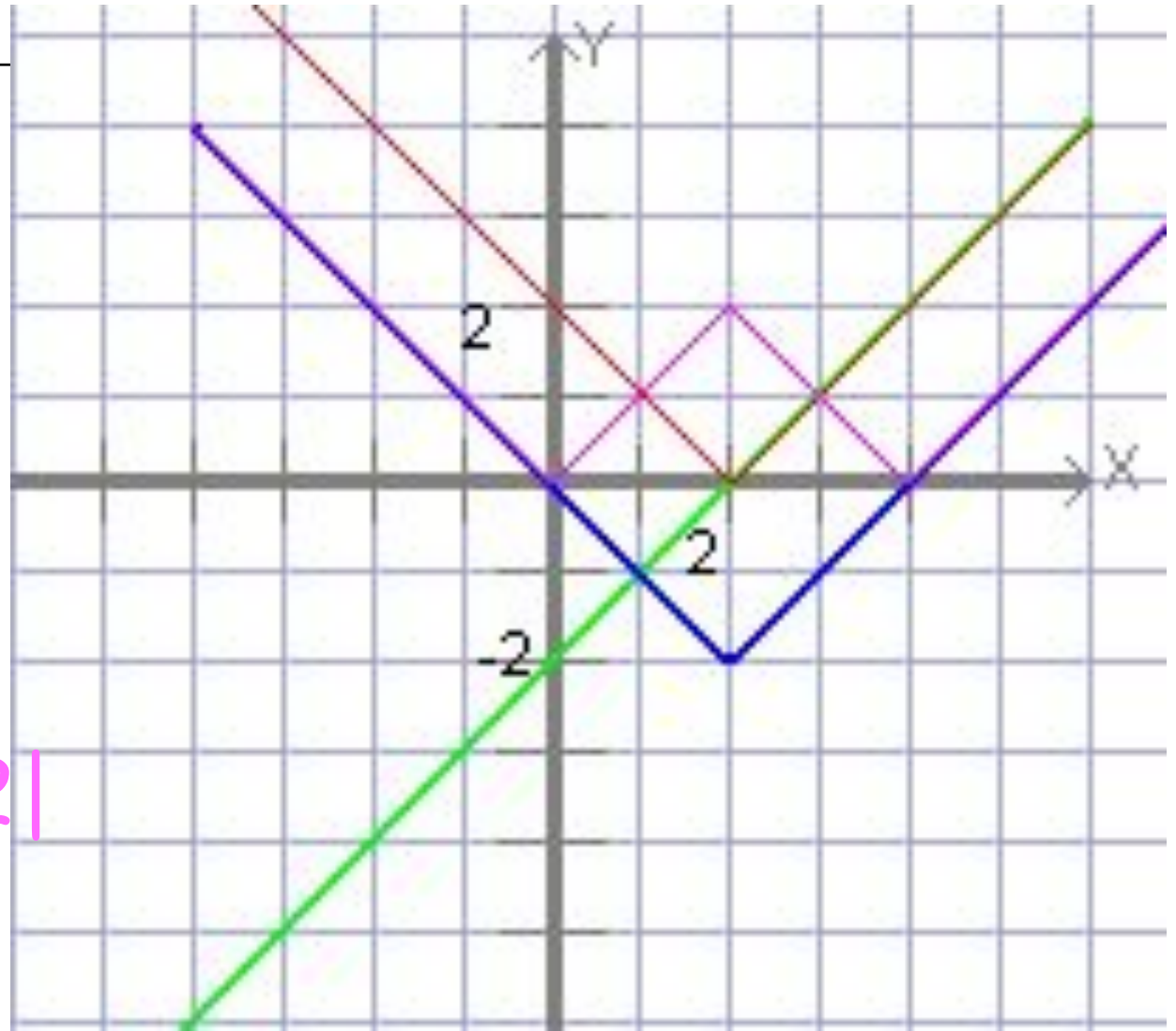
$$y = ||x-2|-2|$$

$$y = x - 2$$

$$y = |x-2|$$

$$y = |x-2| - 2$$

$$y = ||x-2|-2|$$



$$y = |x^2 - 5|x| + 6|$$

$$y = x^2 - 5x + 6$$

$$y = x^2 - 5|x| + 6$$

$$y = |x^2 - 5|x| + 6|$$

