

Савченко Е.М., учитель математики,
МОУ гимназия №1, г. Полярные Зори, Мурманской обл.

Графики функций

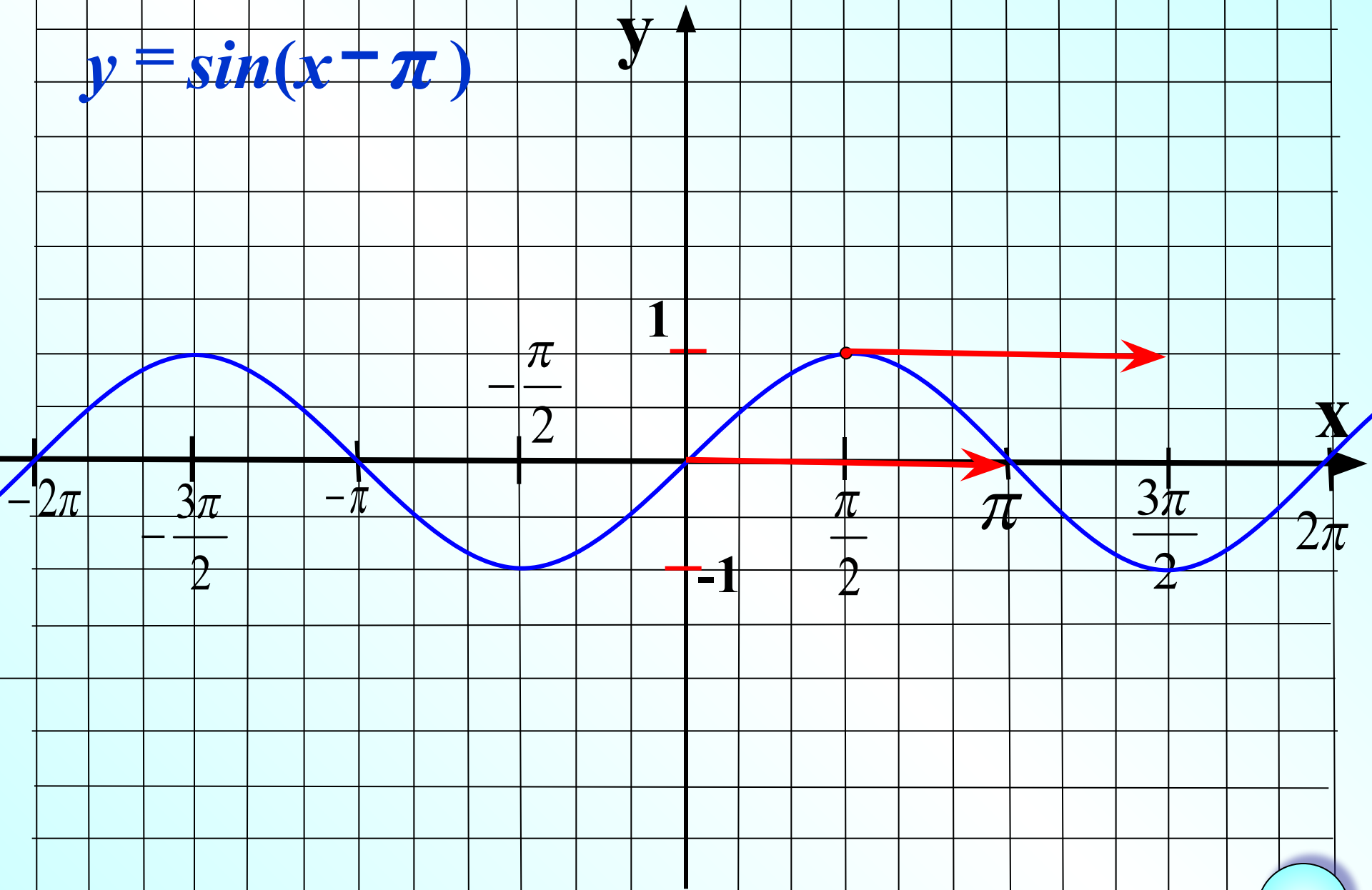
$$y = \cos(x + a),$$

$$y = \cos x + a,$$

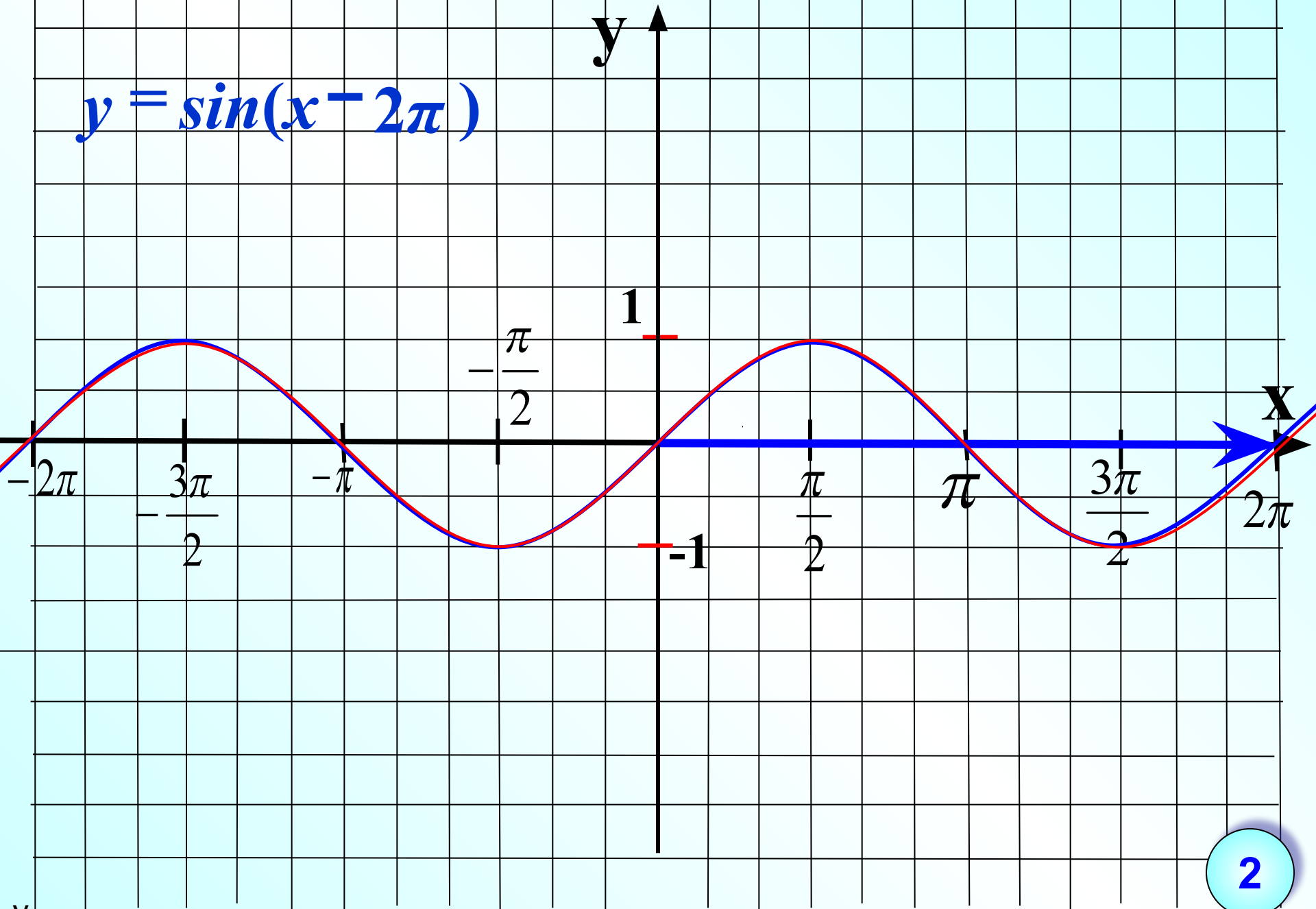
$$y = \sin(x + a),$$

$$y = \sin x + a$$

$$y = \sin(x - \pi)$$

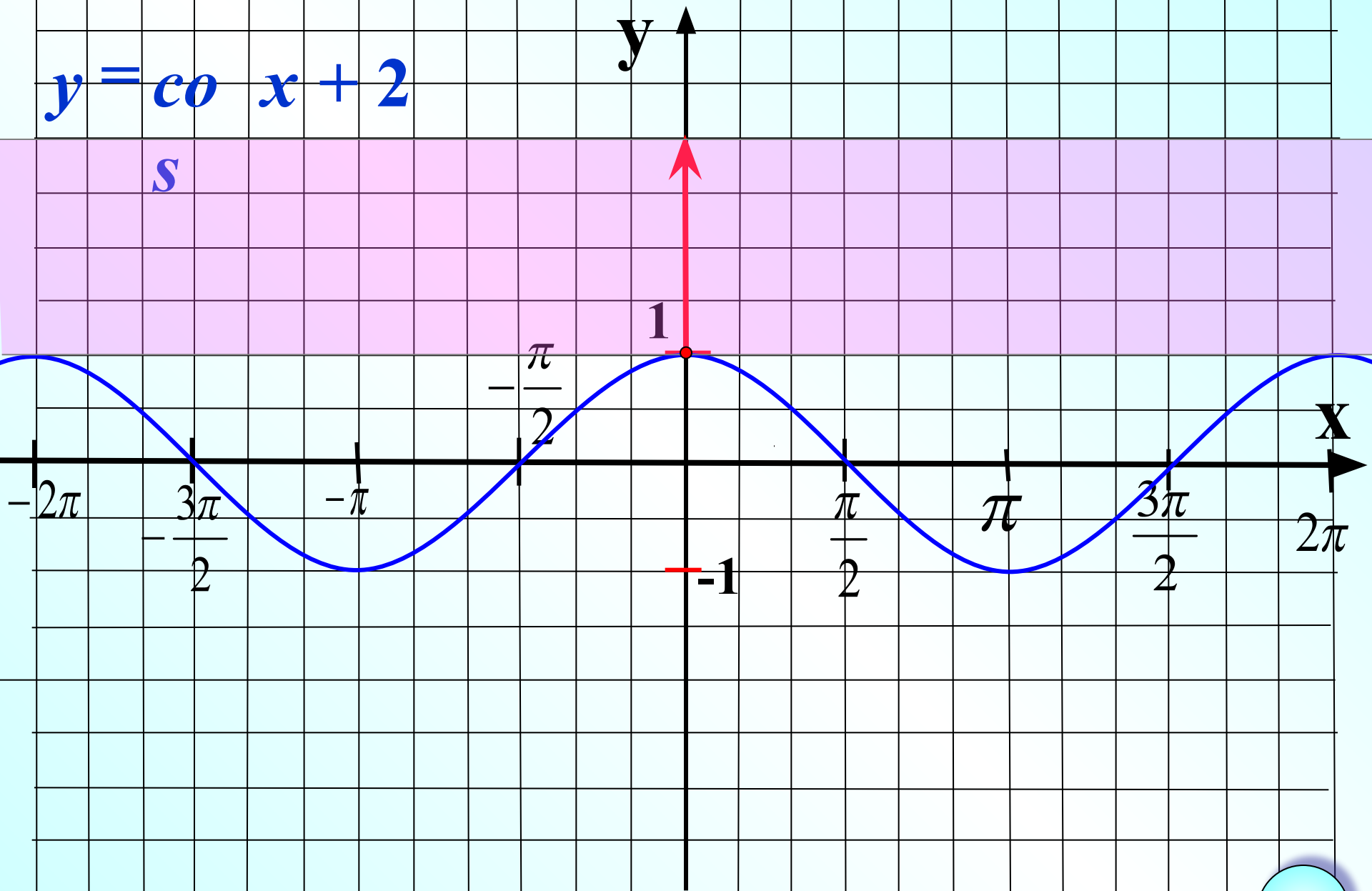


$$y = \sin(x - 2\pi)$$

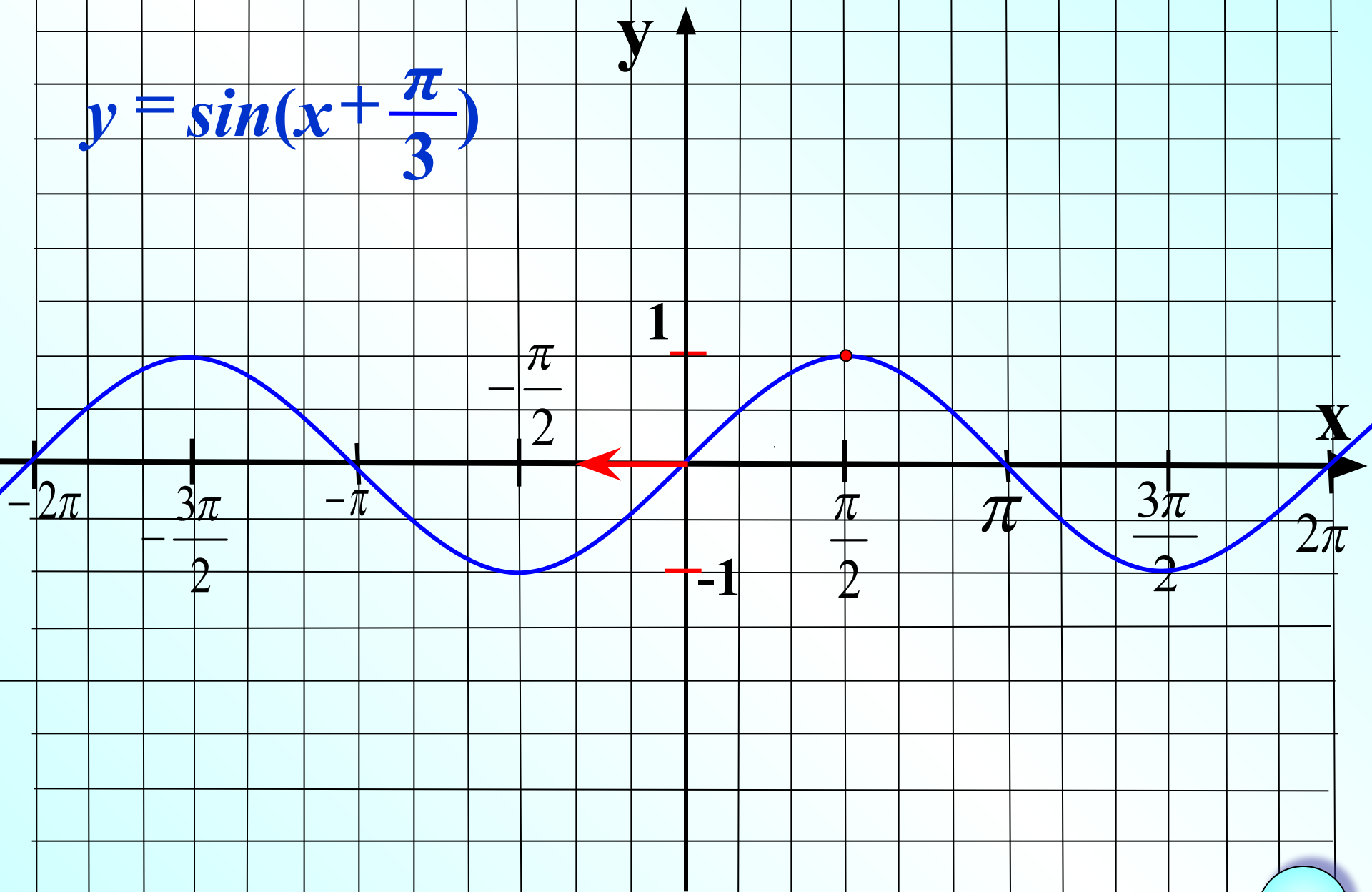


$$y = \cos x + 2$$

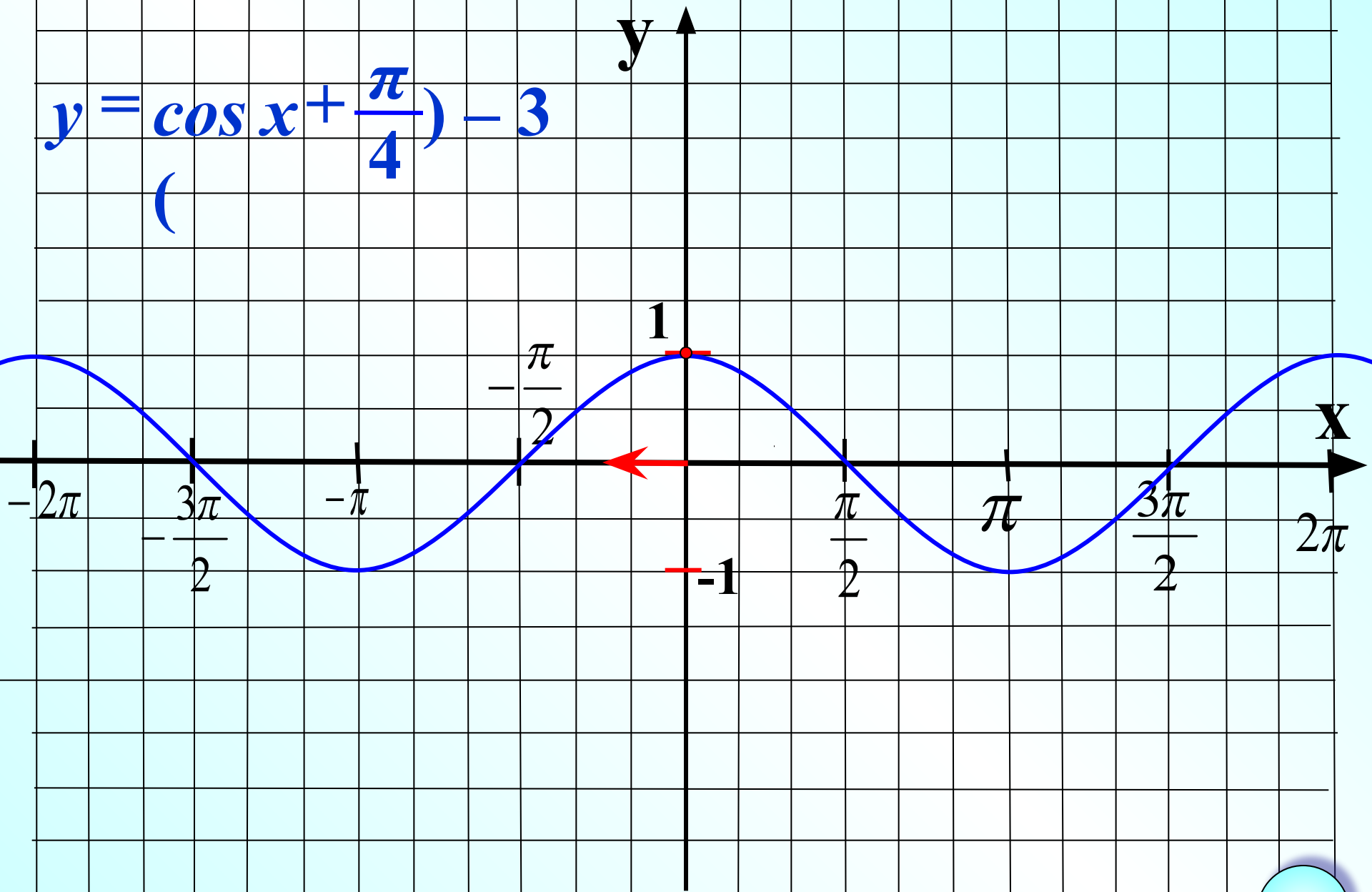
s

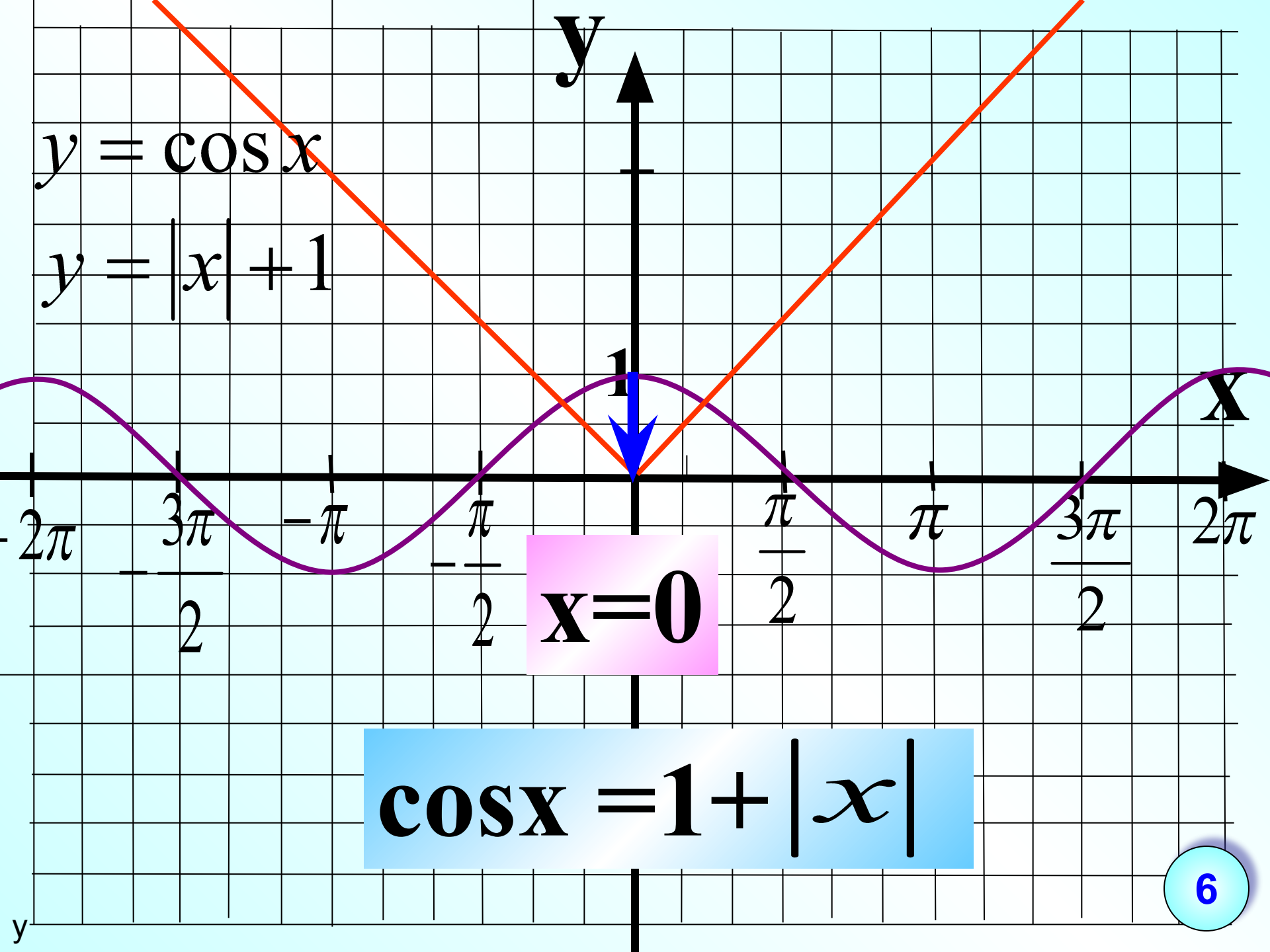


$$y = \sin\left(x + \frac{\pi}{3}\right)$$



$$y = \cos\left(x + \frac{\pi}{4}\right) - 3$$



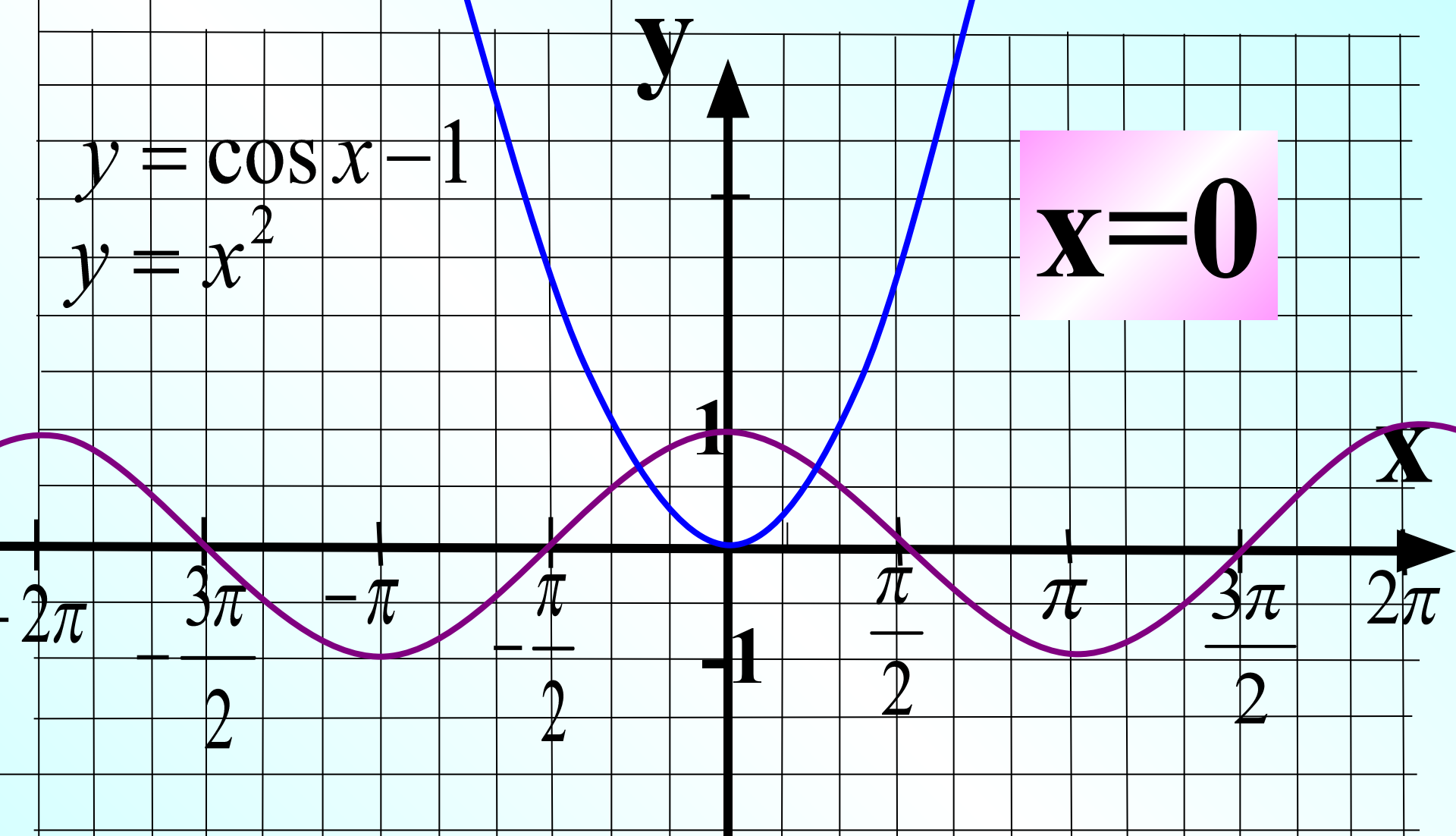


$$y = \cos x$$

$$y = |x| + 1$$

$$x=0$$

$$\cos x = 1 + |x|$$

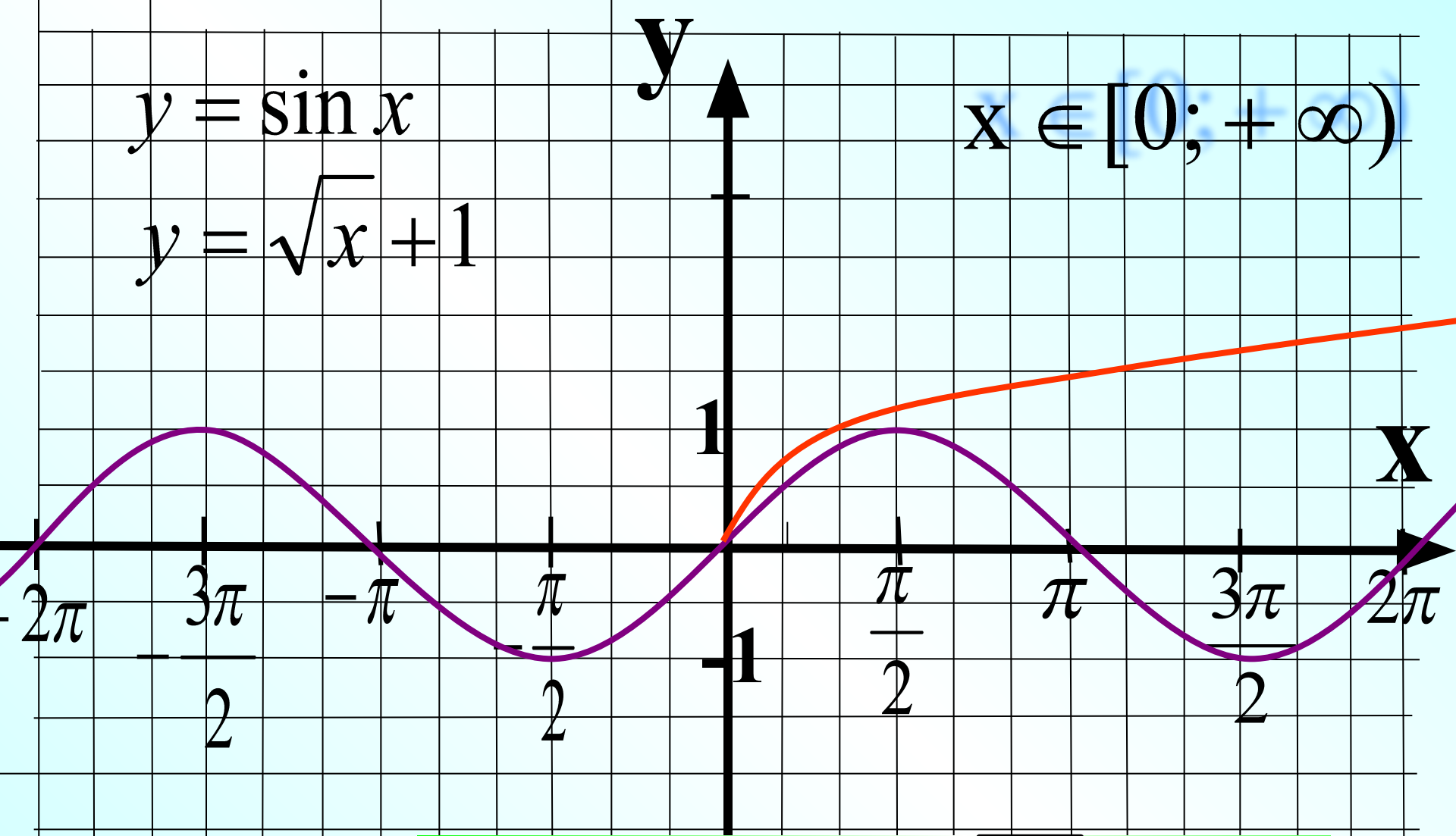


$$\cos x - 1 = x^2$$

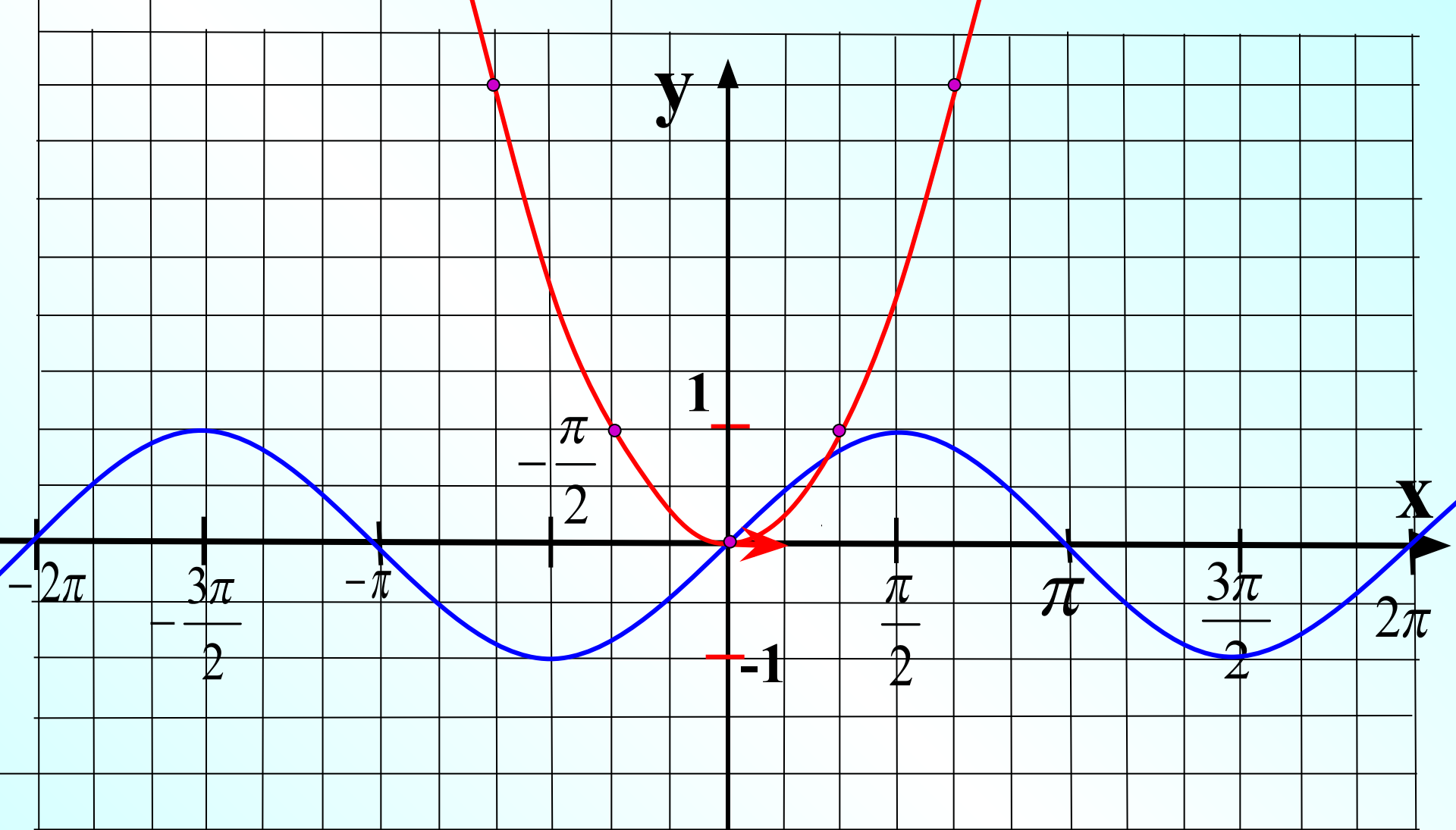
$$y = \sin x$$

$$y = \sqrt{x} + 1$$

$$x \in [0; +\infty)$$

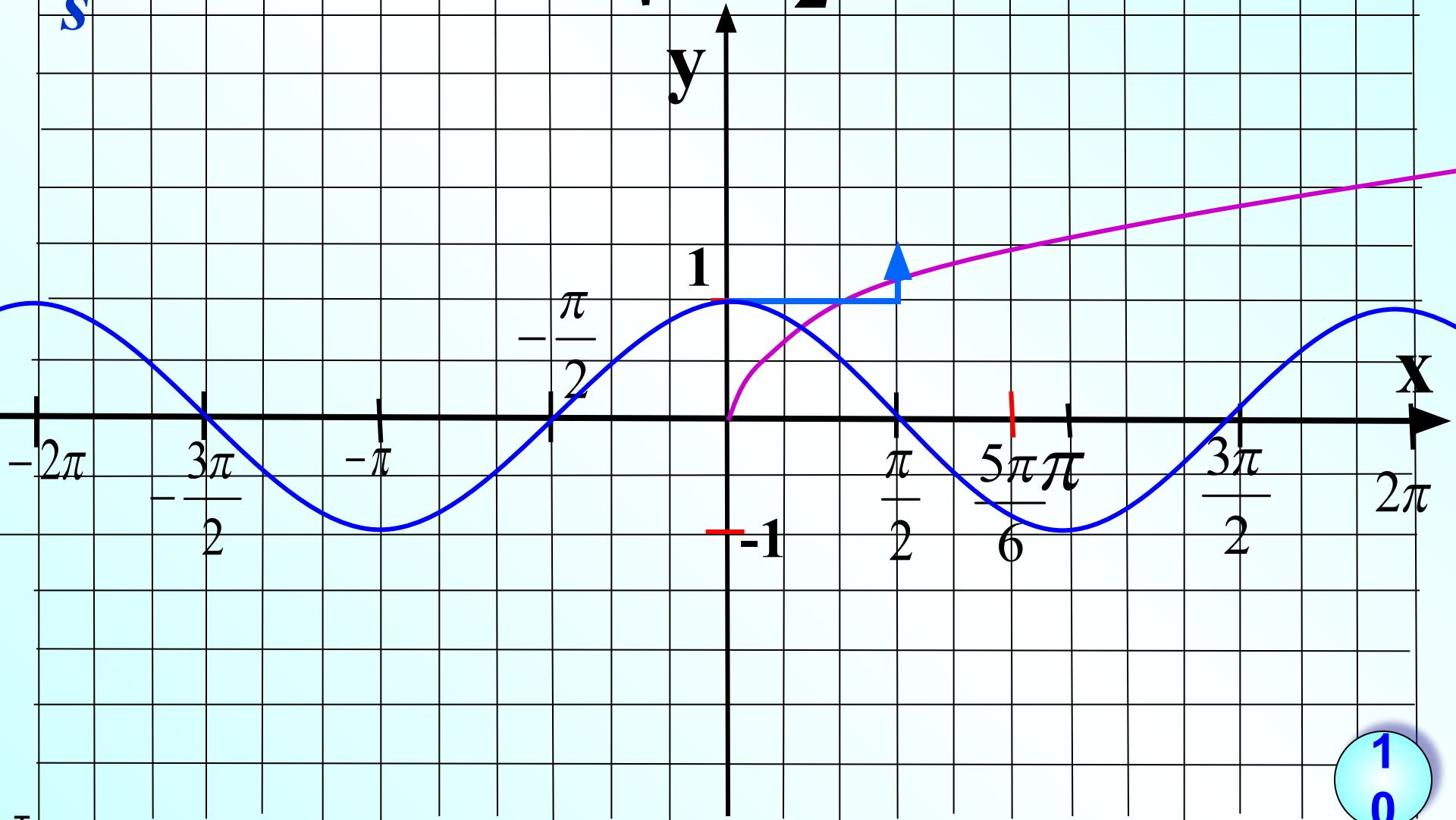


$$\sin x < \sqrt{x} + 1$$

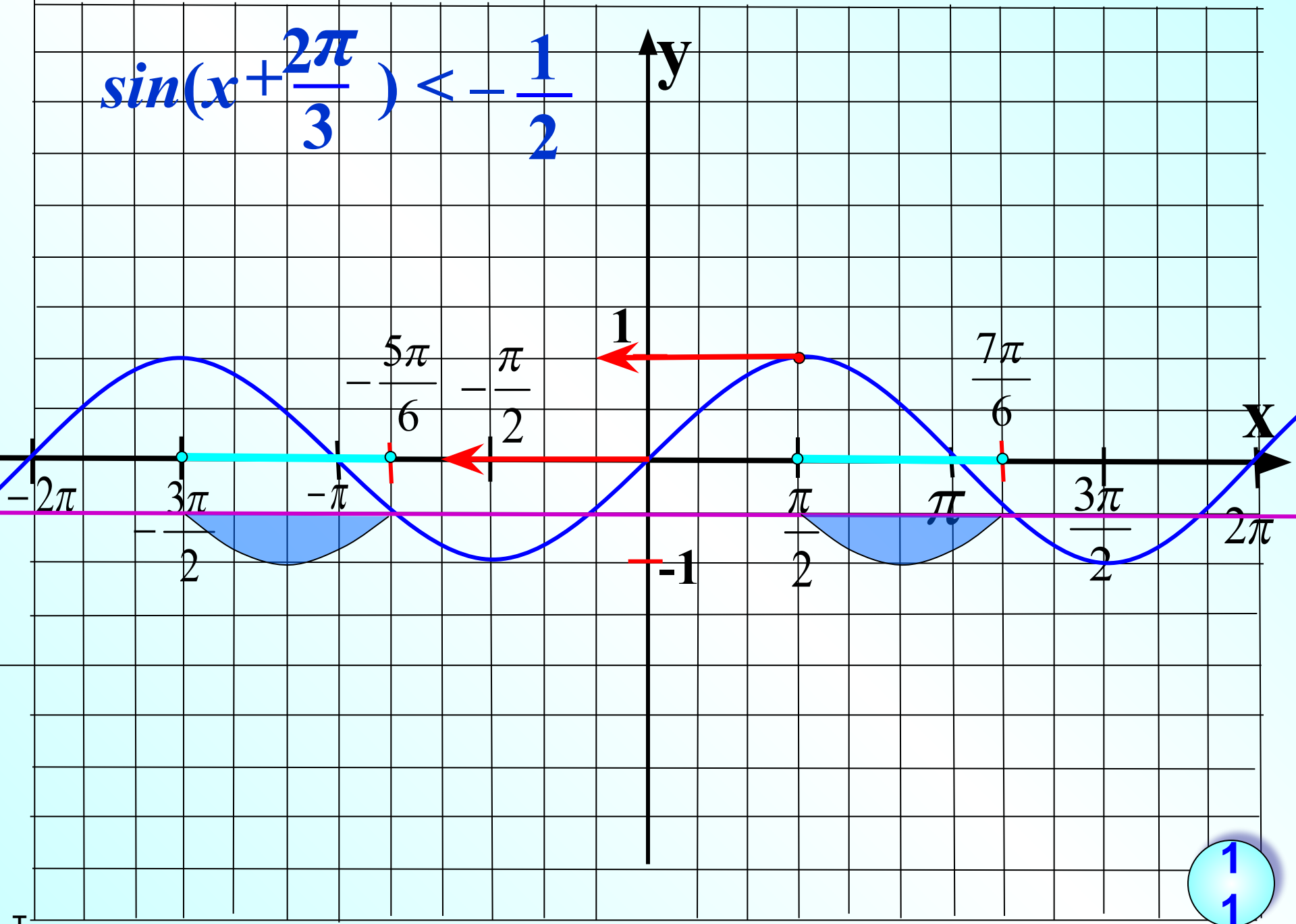


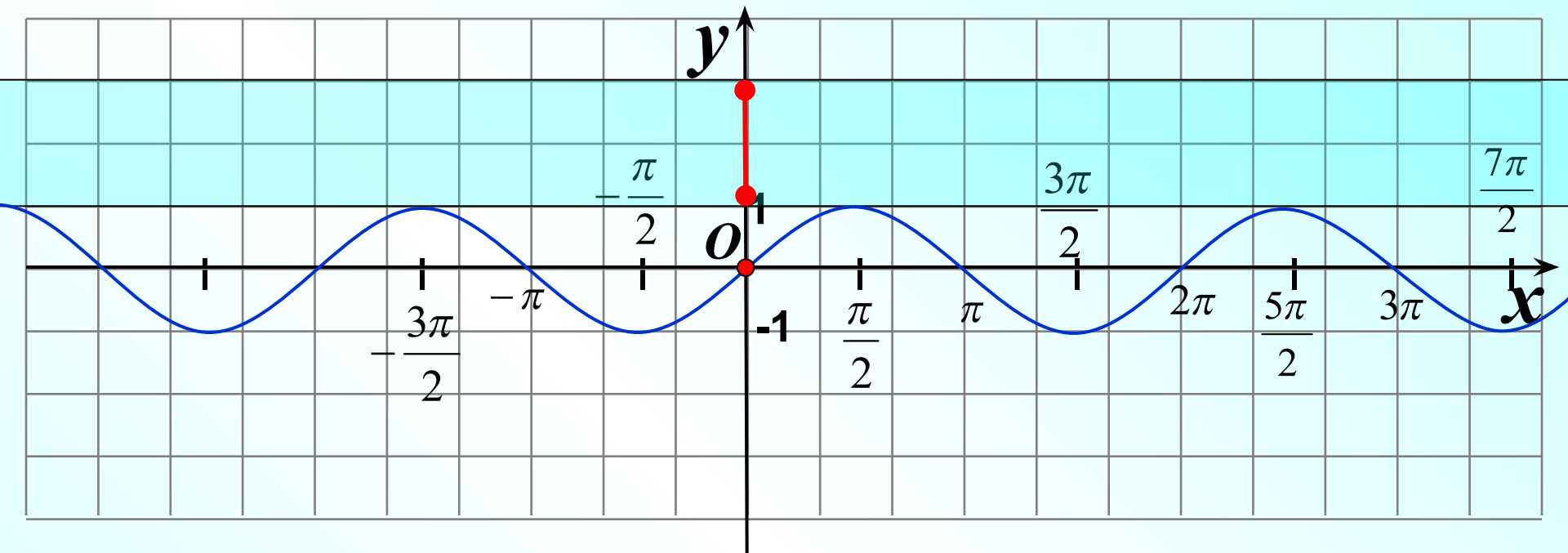
$$\sin\left(x - \frac{\pi}{6}\right) = \left(x - \frac{\pi}{3}\right)^2 + 1$$

$$\cos\left(x - \frac{\pi}{2}\right) + 0,5 = \sqrt{x - \frac{\pi}{2}}$$



$$\sin\left(x + \frac{2\pi}{3}\right) < -\frac{1}{2}$$





Найти область значений функции

$$y = \sin\left(x - \frac{3\pi}{2}\right) + 2$$

$$E(y) : y \in [1; 3]$$

Умение строить графики нам нужны при ...

- ✓ решению уравнений;
- ✓ решению неравенств;
- ✓ решению заданий, связанных с исследованием свойств функций.