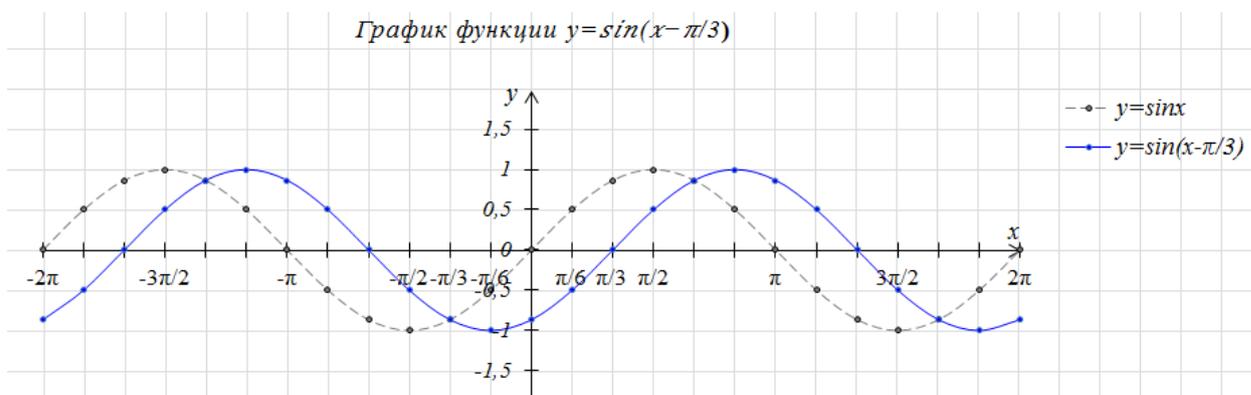


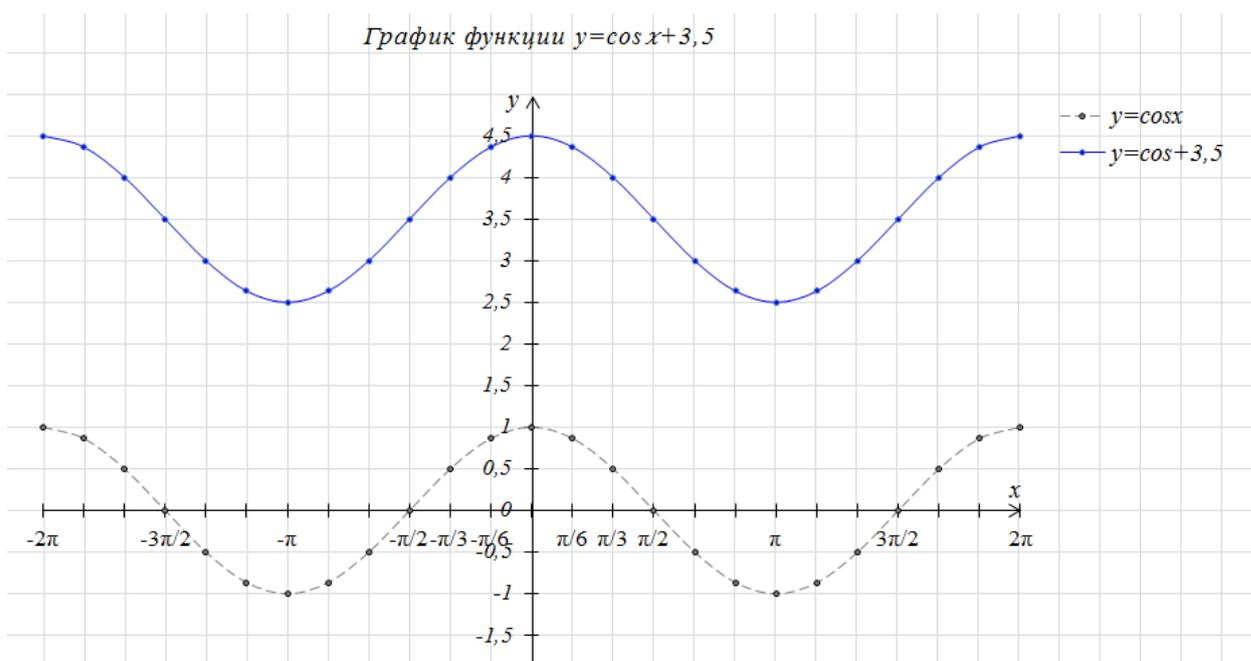
# Преобразование графиков тригонометрических функций

## Вариант 1

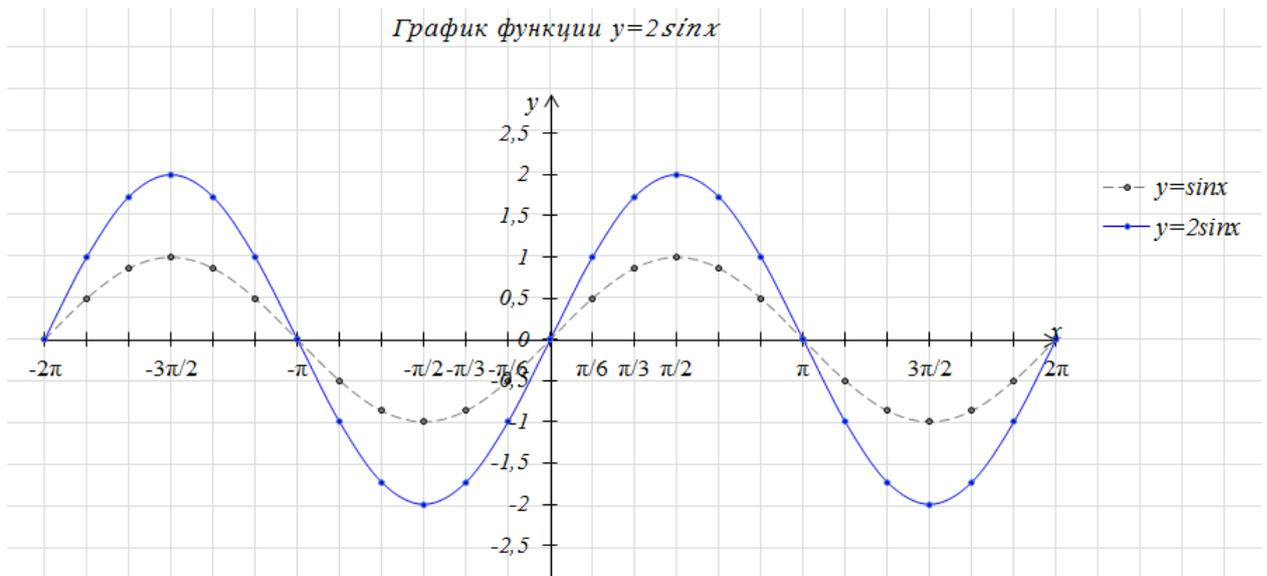
1) Построить график функции  $y = \sin\left(x - \frac{\pi}{3}\right)$



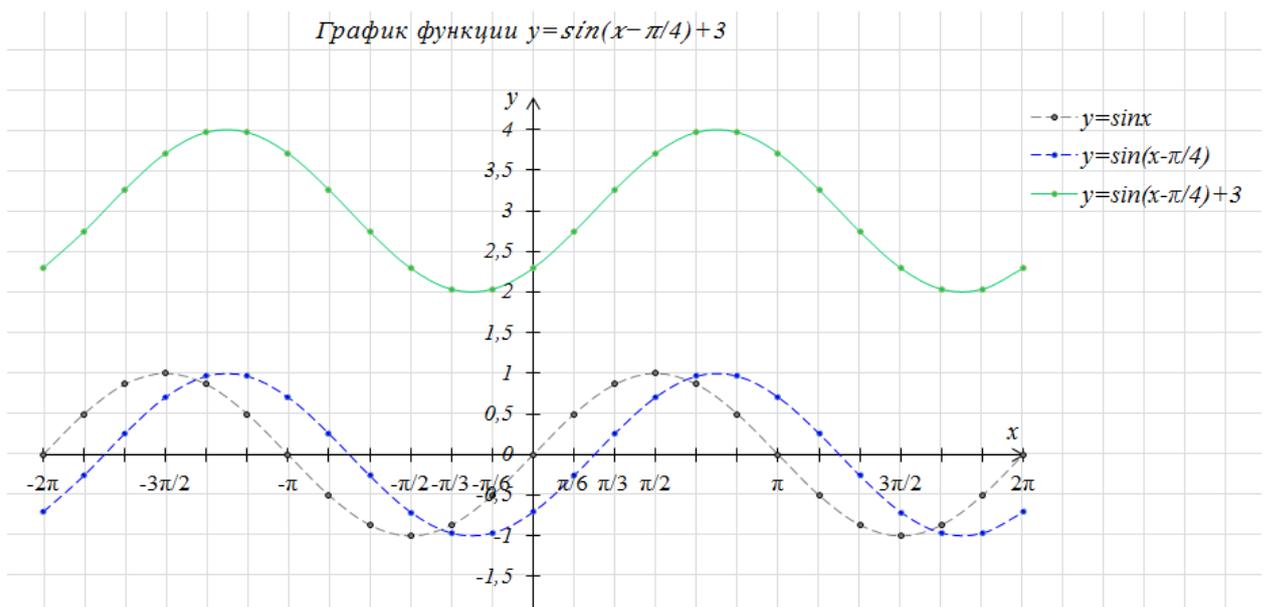
2) Построить график функции  $y = \cos x + 3,5$



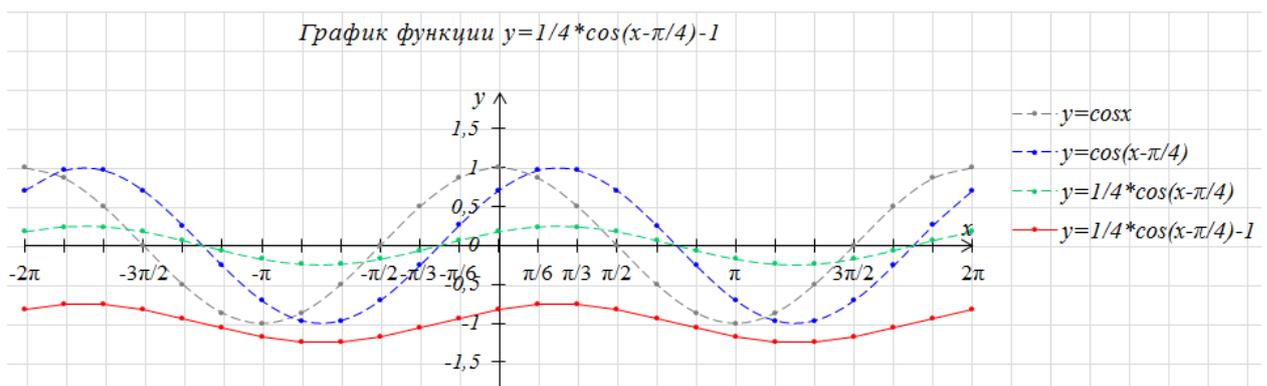
3) Построить график функции  $y = 2\sin x$



4) Построить график функции  $y = \sin\left(x - \frac{\pi}{4}\right) + 3$

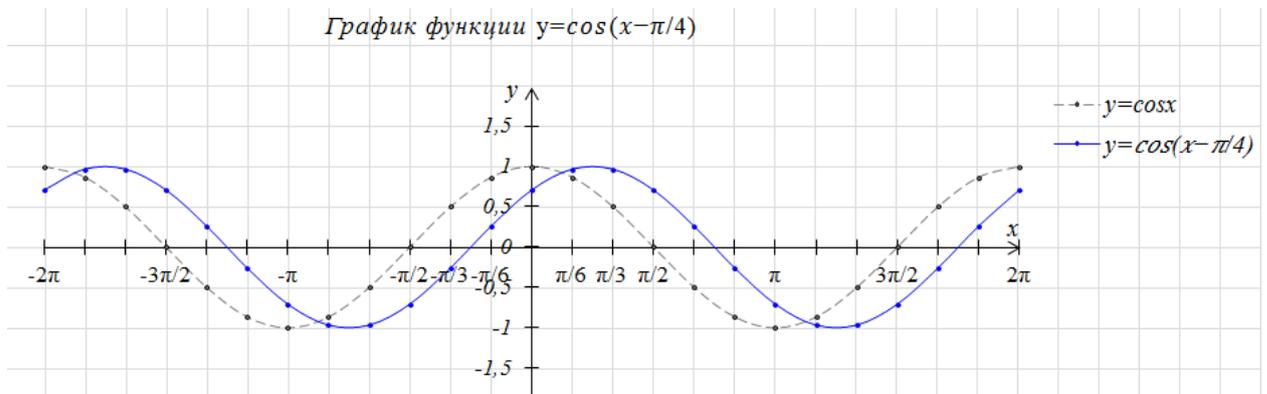


5) Построить график функции  $y = \frac{1}{4}\cos\left(x - \frac{\pi}{4}\right) - 1$

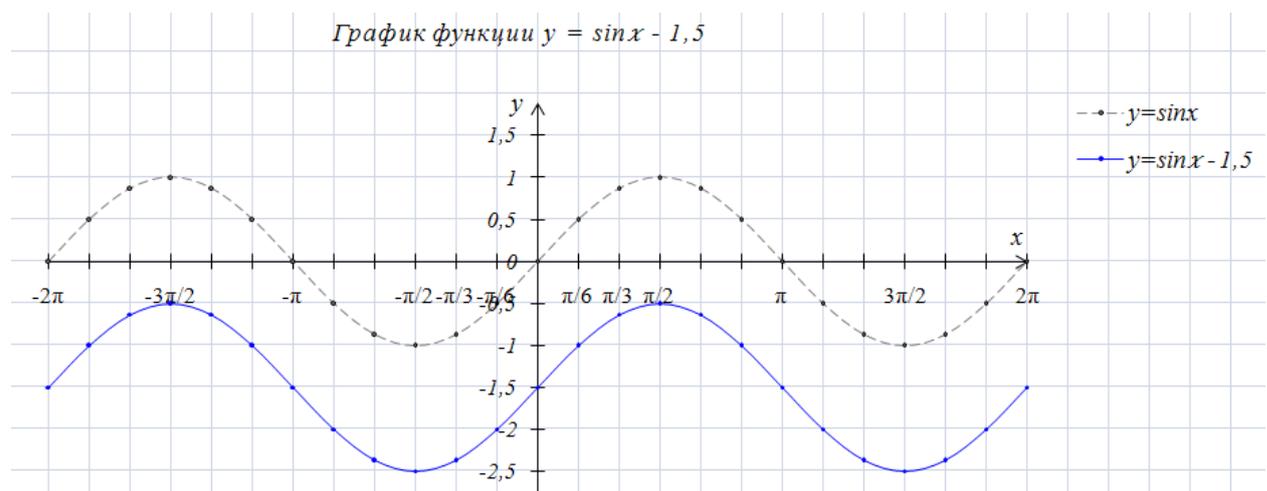


## Вариант 2

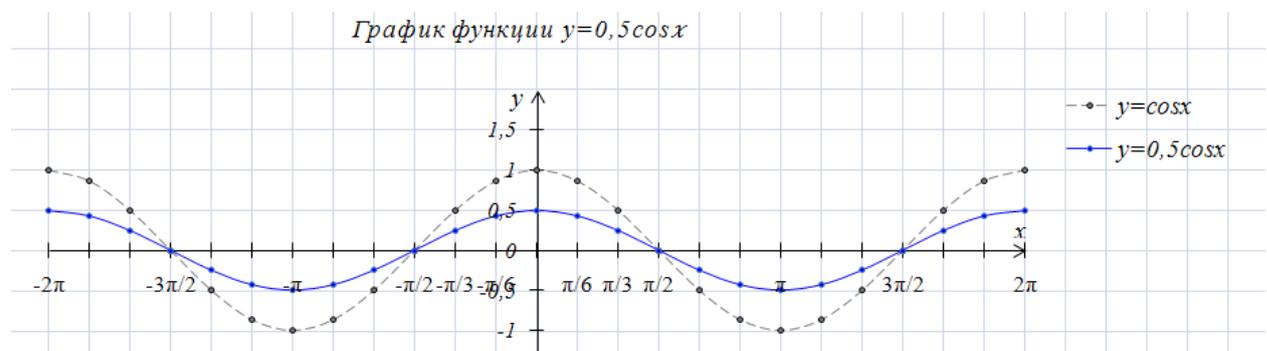
1) Построить график функции  $y = \cos\left(x - \frac{\pi}{4}\right)$



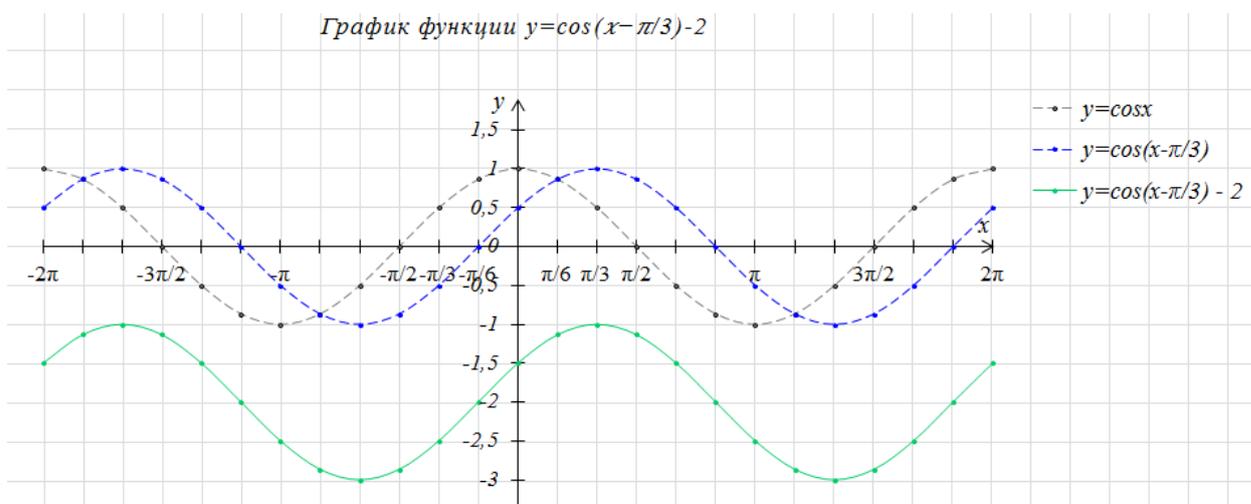
2) Построить график функции  $y = \sin x - 1,5$



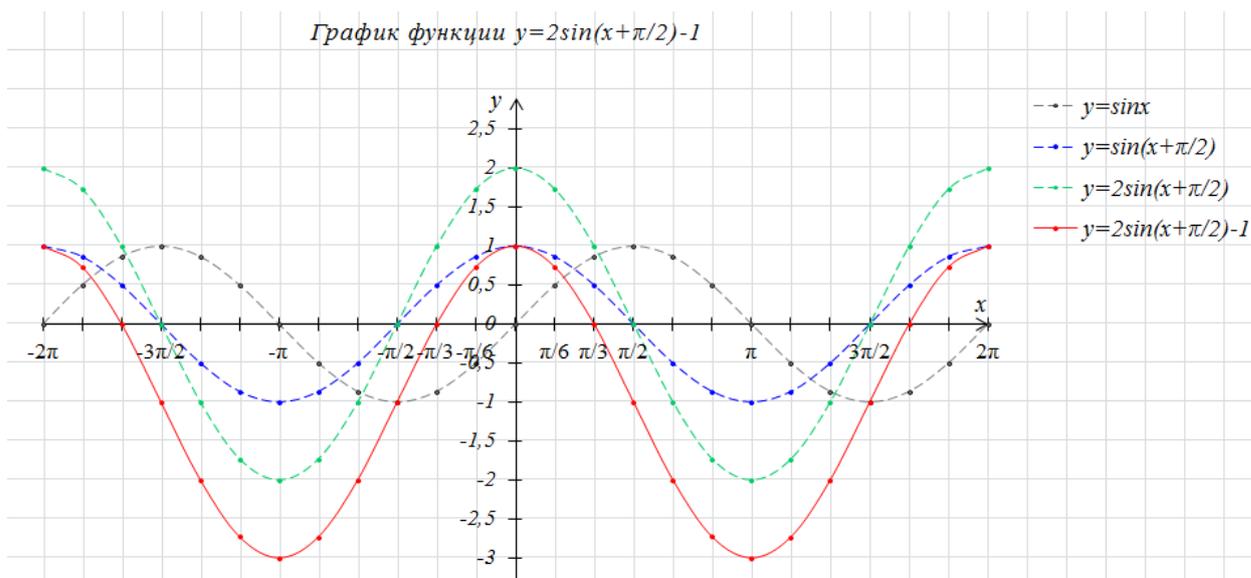
3) Построить график функции  $y = 0,5 \cos x$



4) Построить график функции  $y = \cos\left(x - \frac{\pi}{3}\right) - 2$

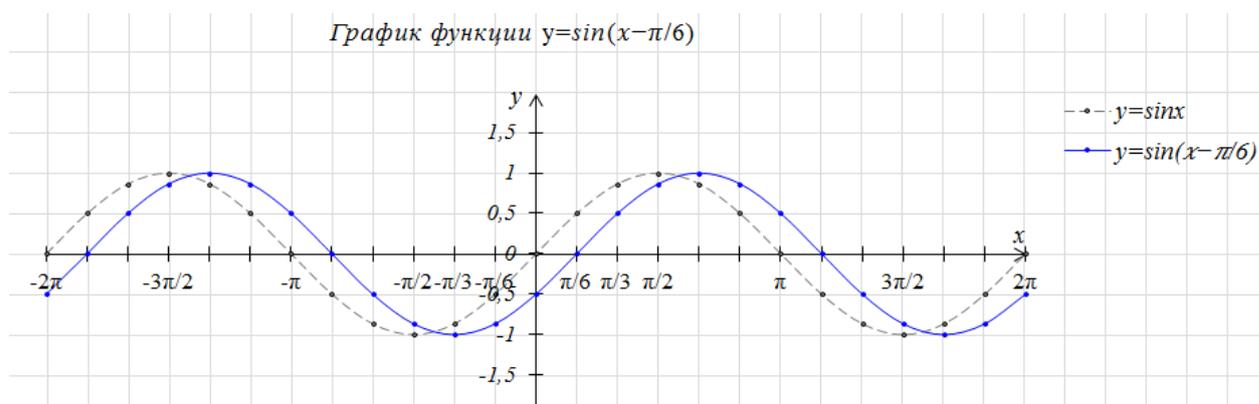


5) Построить график функции  $y = 2 \sin\left(x + \frac{\pi}{2}\right) - 1$

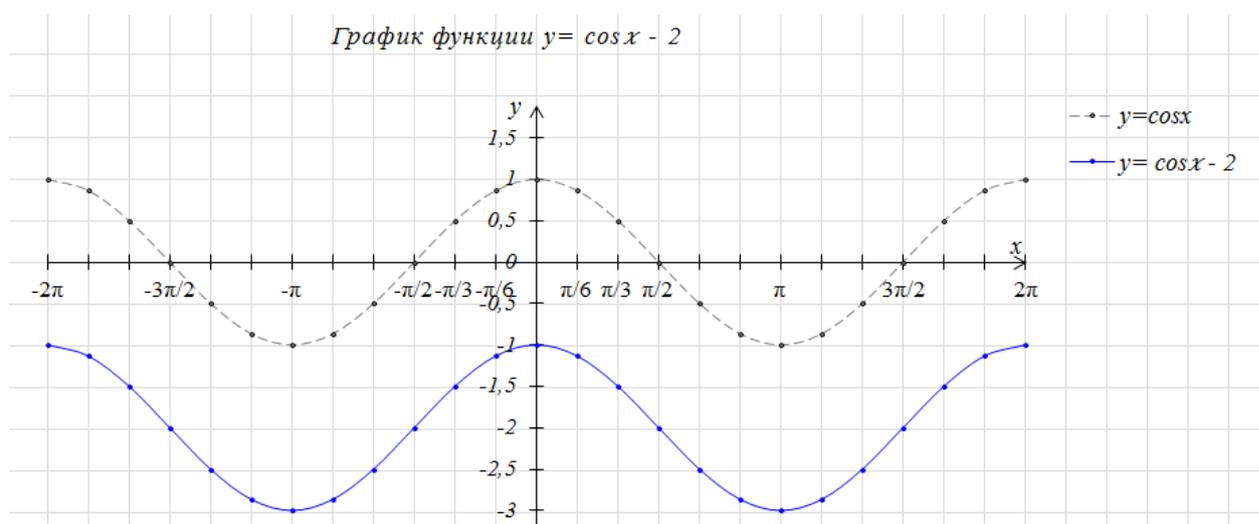


### Вариант 3

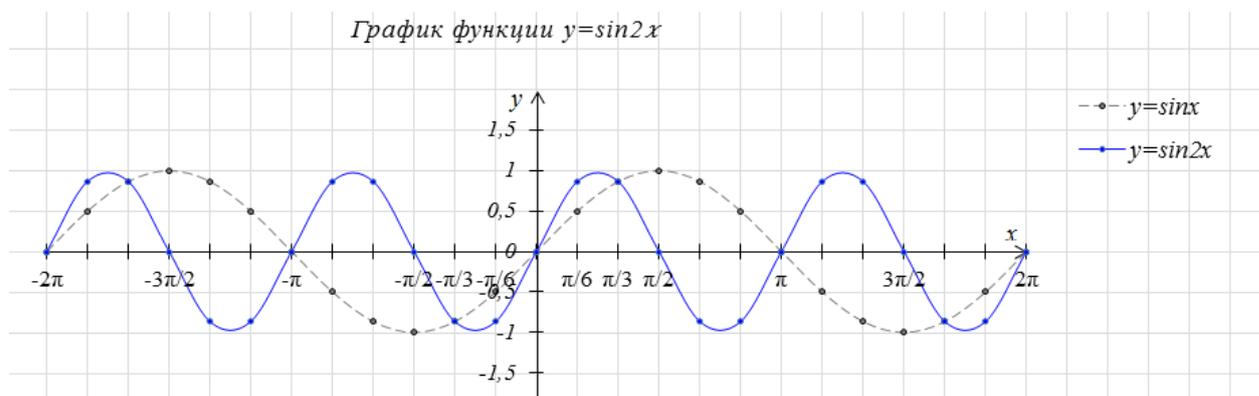
1) Построить график функции  $y = \sin\left(x - \frac{\pi}{6}\right)$



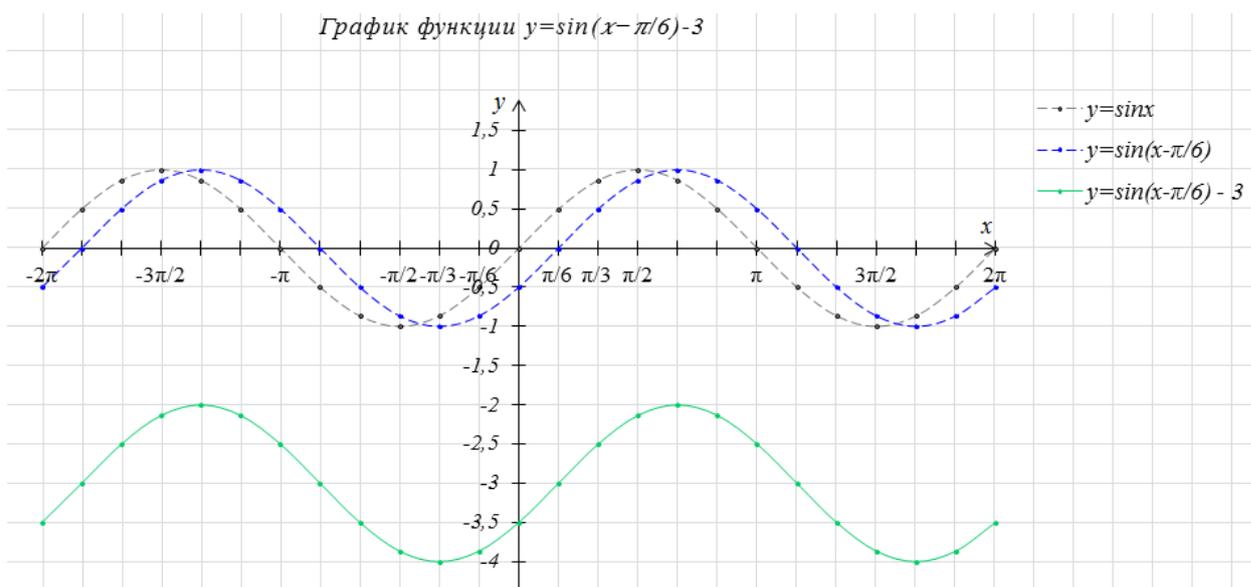
2) Построить график функции  $y = \cos x - 2$



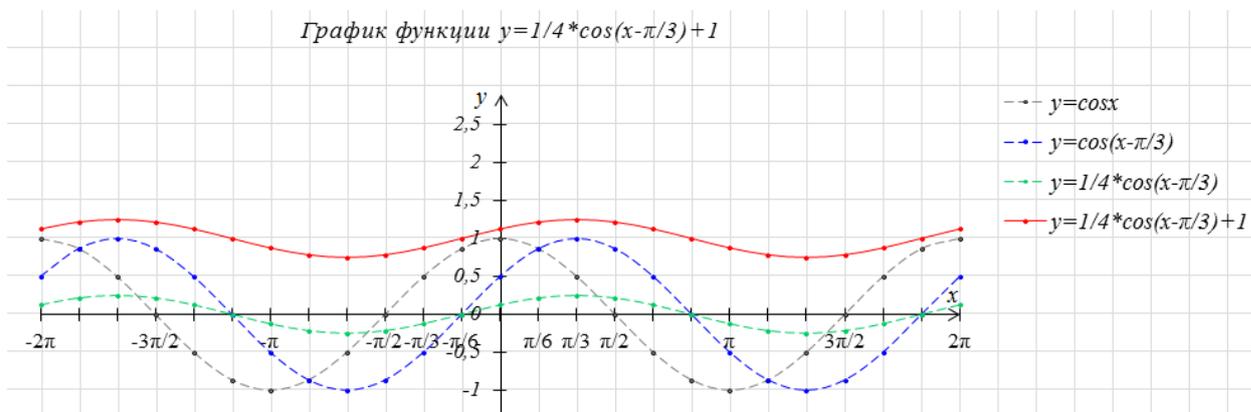
3) Построить график функции  $y = \sin 2x$



4) Построить график функции  $y = \sin\left(x - \frac{\pi}{6}\right) - 3$

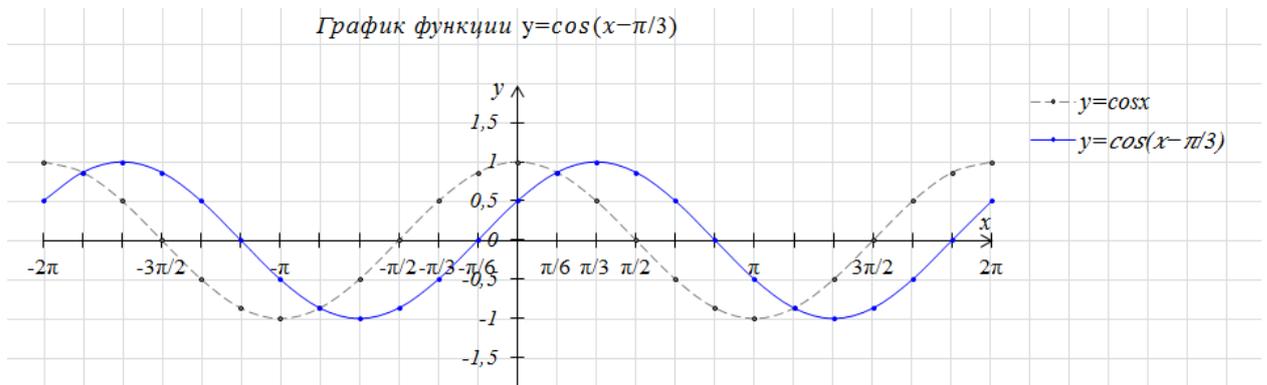


5) Построить график функции  $y = \frac{1}{4} \cos\left(x - \frac{\pi}{3}\right) + 1$

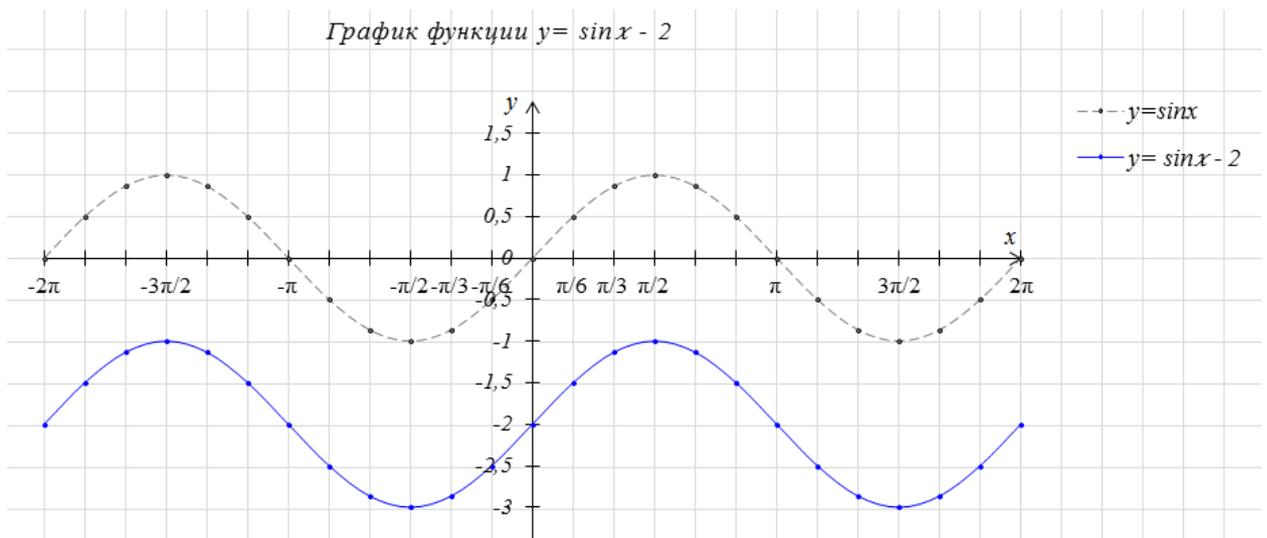


### Вариант 4

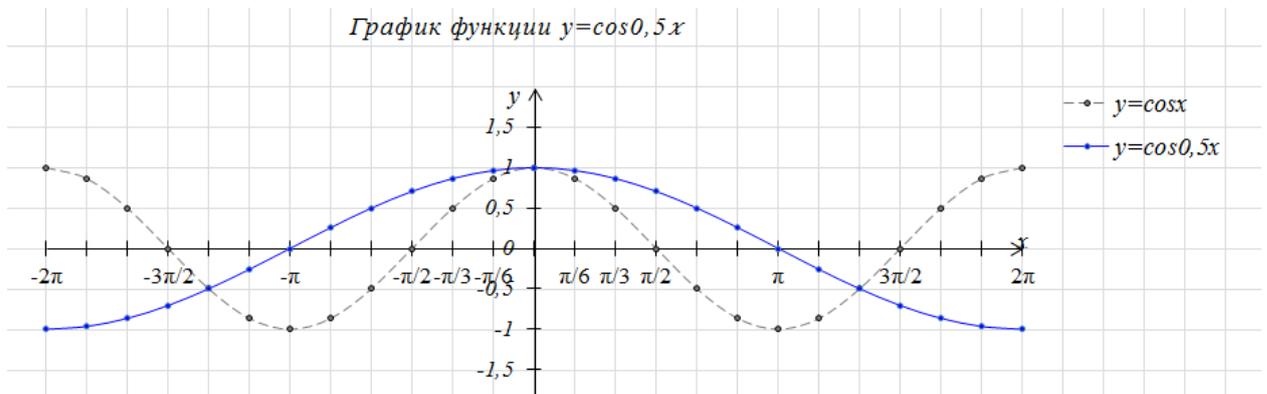
1) Построить график функции  $y = \cos\left(x - \frac{\pi}{3}\right)$



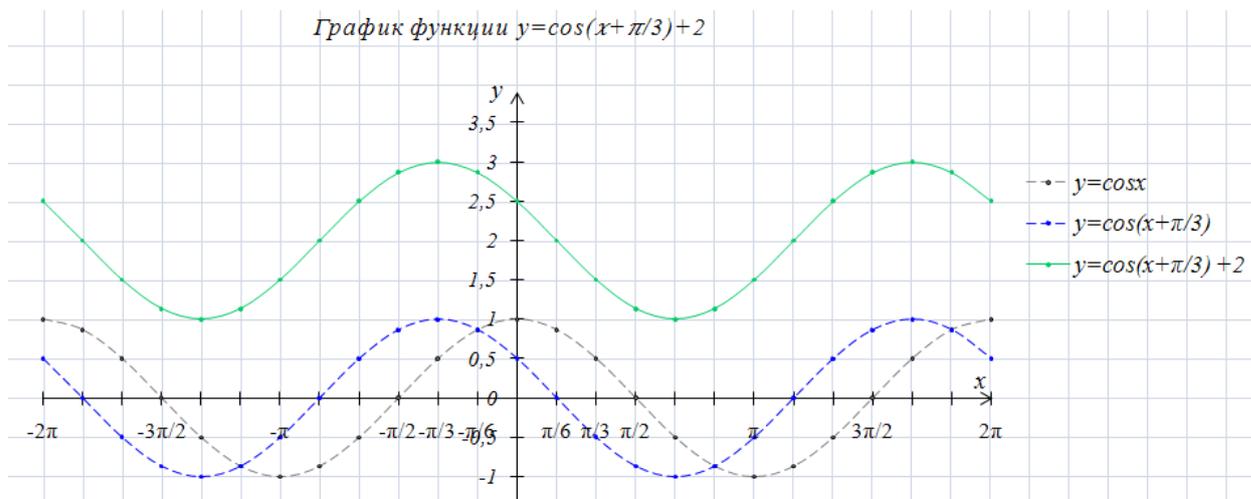
2) Построить график функции  $y = \sin x - 2$



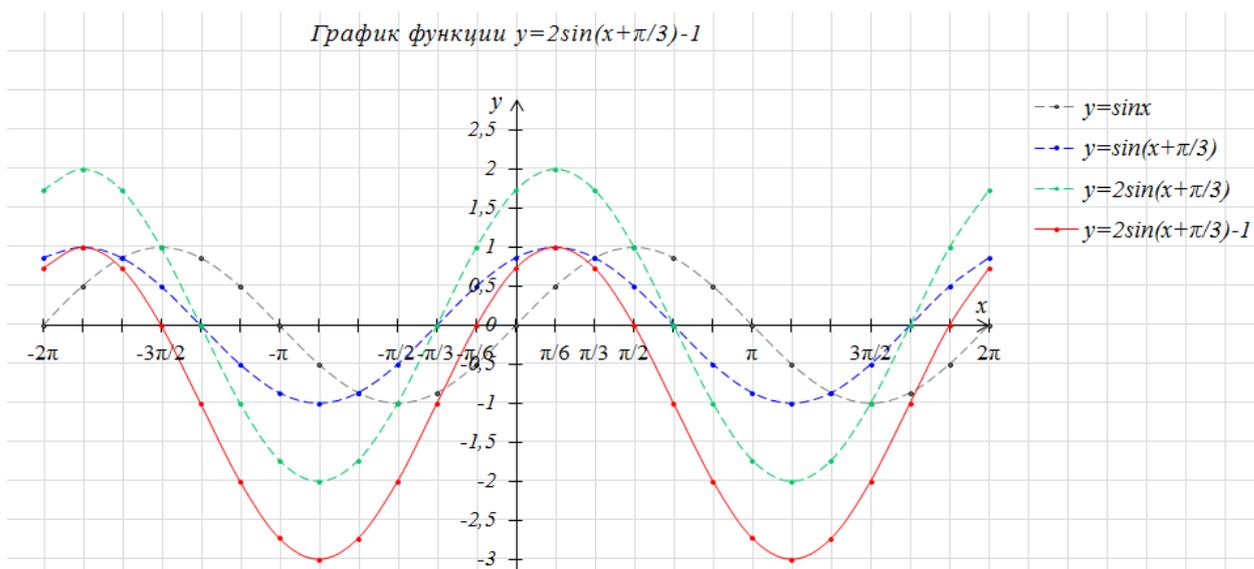
3) Построить график функции  $y = \cos 0,5x$



4) Построить график функции  $y = \cos\left(x + \frac{\pi}{3}\right) + 2$

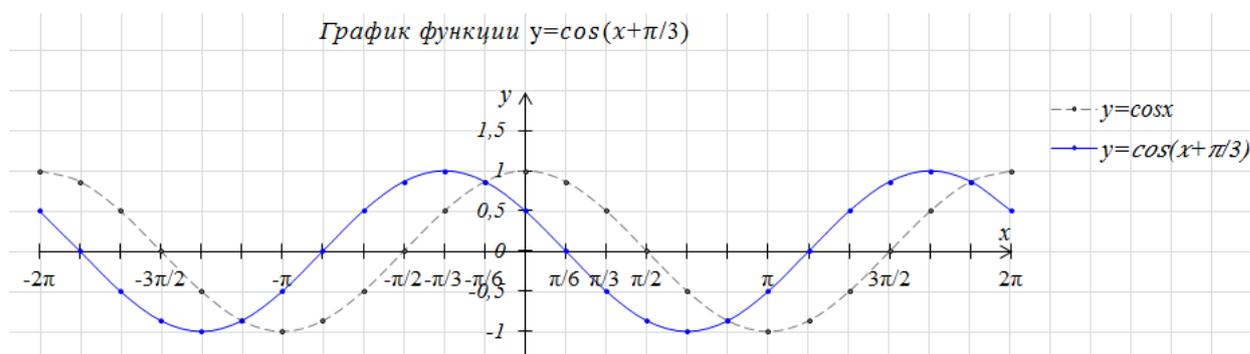


5) Построить график функции  $y = 2 \sin\left(x + \frac{\pi}{3}\right) - 1$

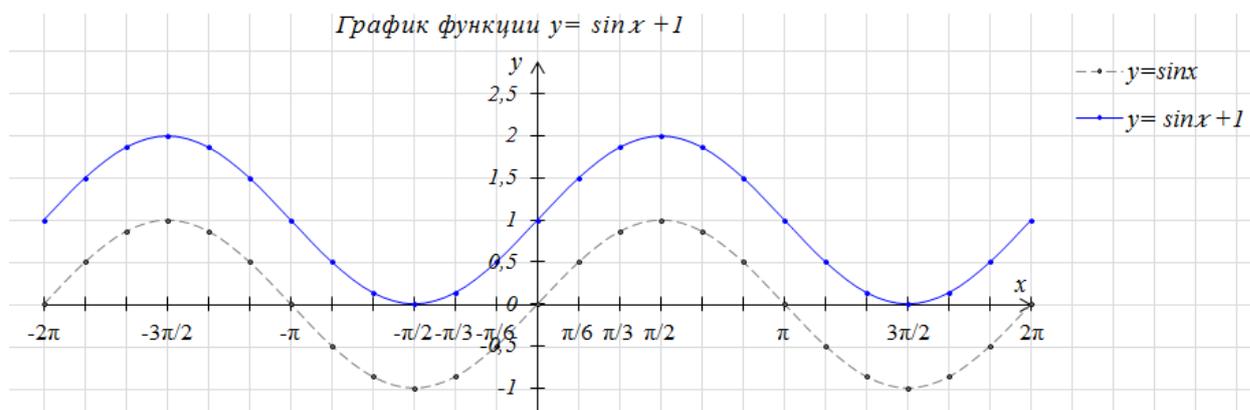


## Вариант 5

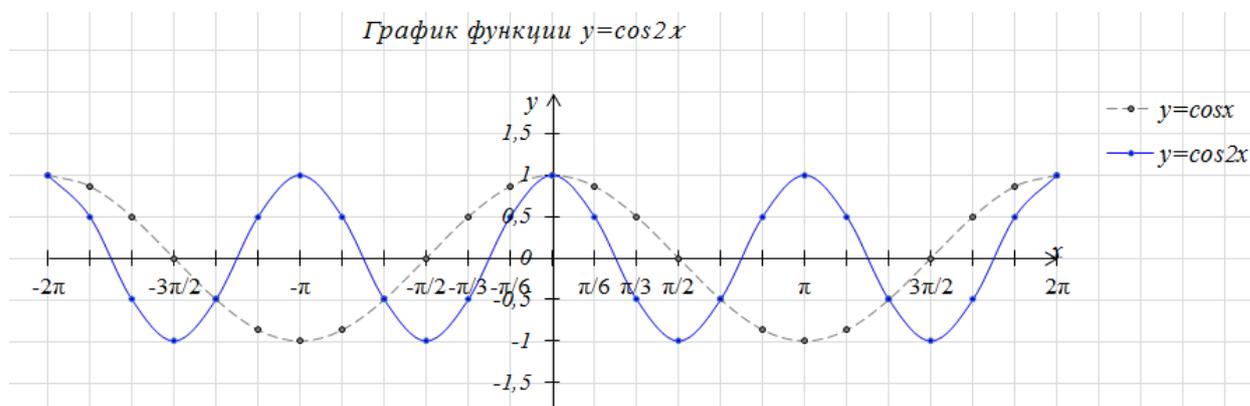
1) Построить график функции  $y = \cos\left(x + \frac{\pi}{3}\right)$



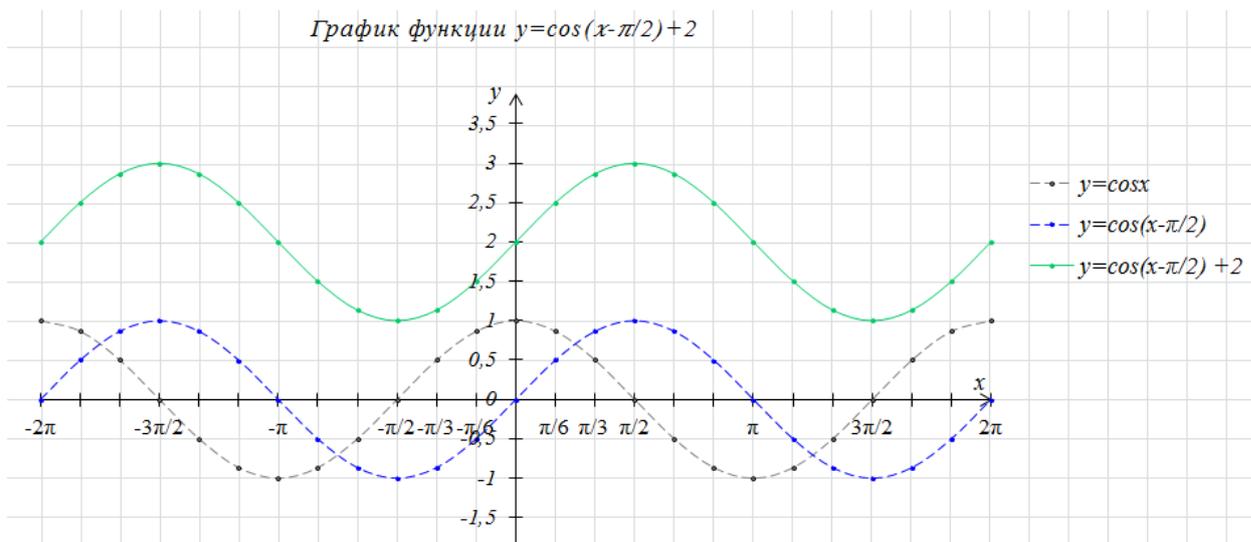
2) Построить график функции  $y = \sin x + 1$



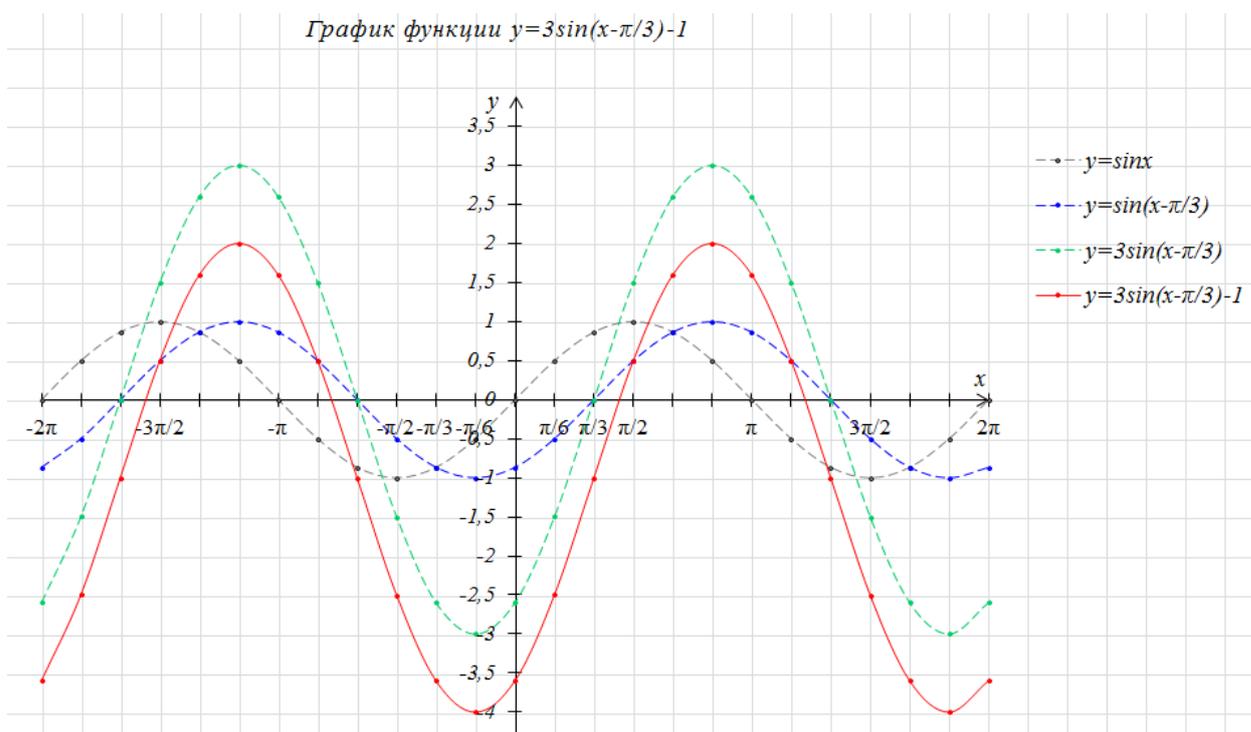
3) Построить график функции  $y = \cos 2x$



4) Построить график функции  $y = \cos\left(x - \frac{\pi}{2}\right) + 2$

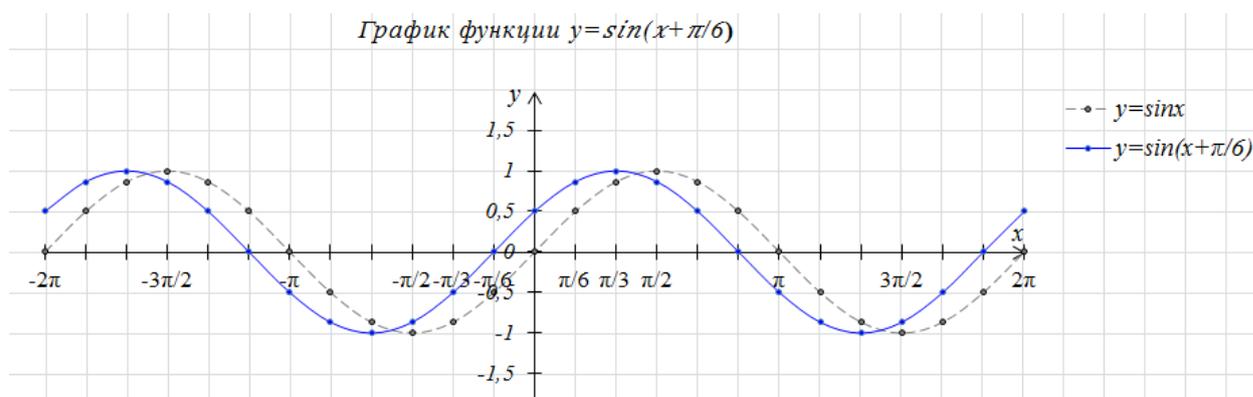


5) Построить график функции  $y = 3 \sin\left(x - \frac{\pi}{3}\right) - 1$

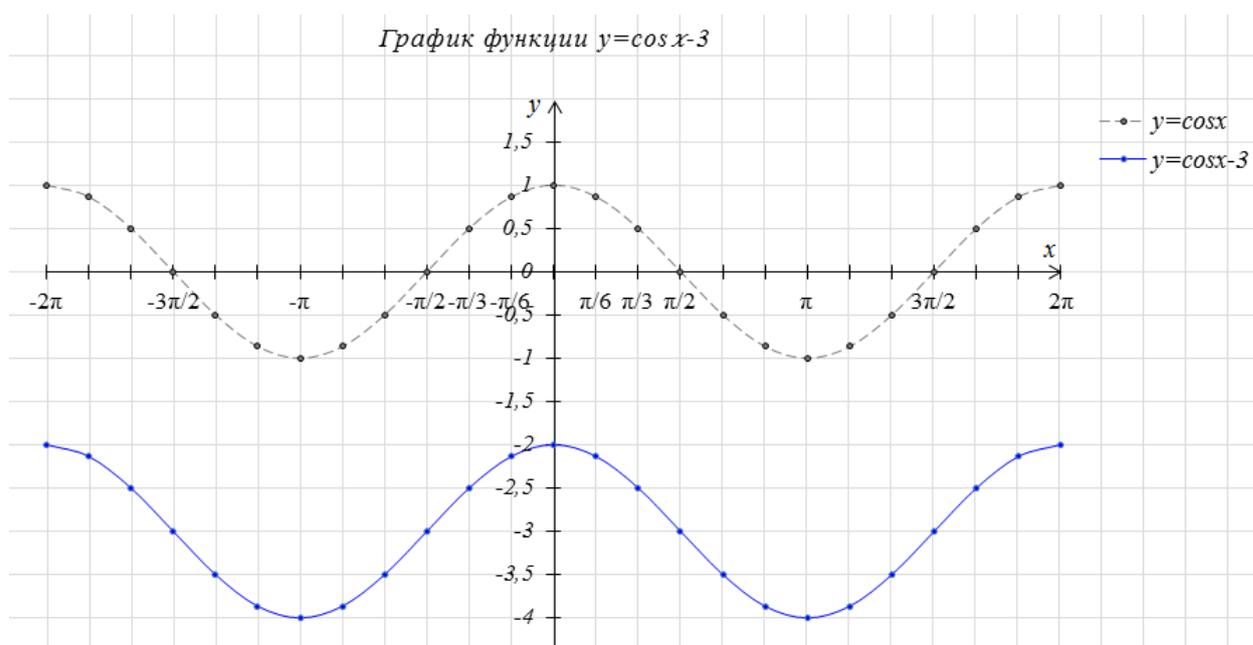


## Вариант 6

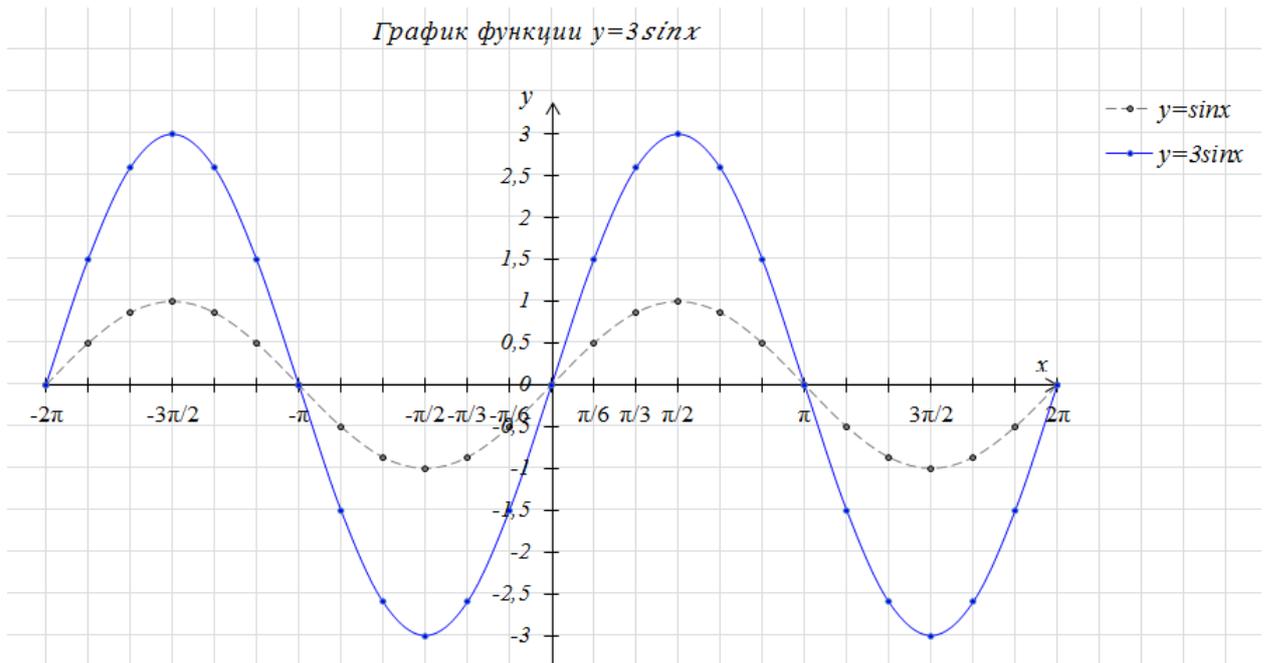
1) Построить график функции  $y = \sin\left(x + \frac{\pi}{6}\right)$



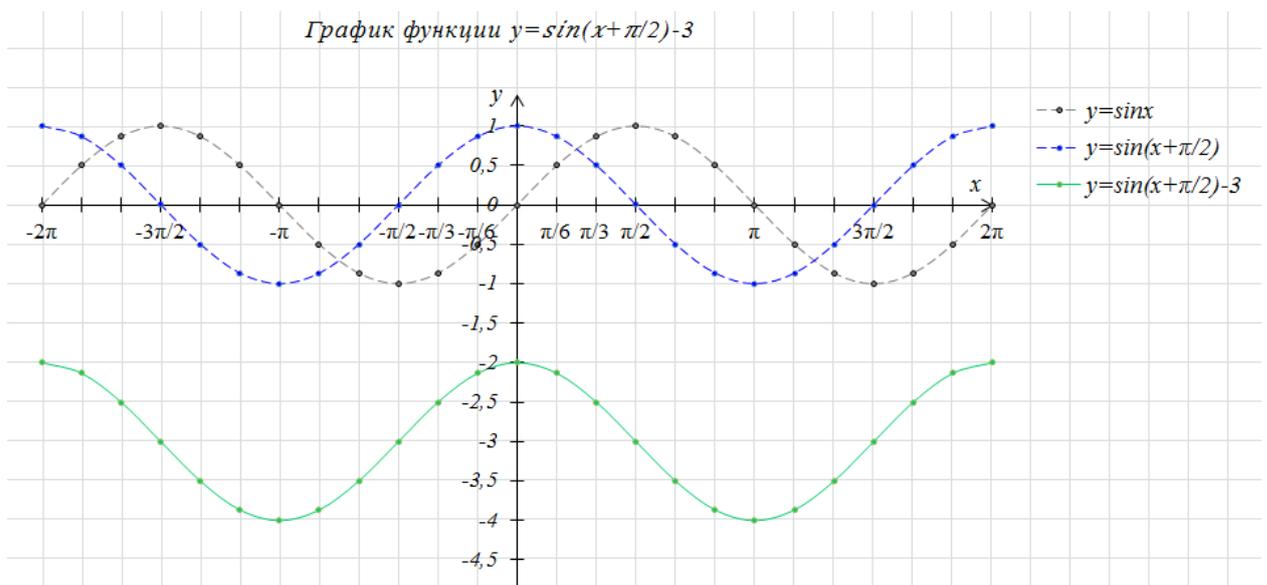
2) Построить график функции  $y = \cos x - 3$



3) Построить график функции  $y = 3 \sin x$



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



5) Построить график функции  $y = \frac{1}{2} \cos\left(x - \frac{\pi}{3}\right) + 1$

