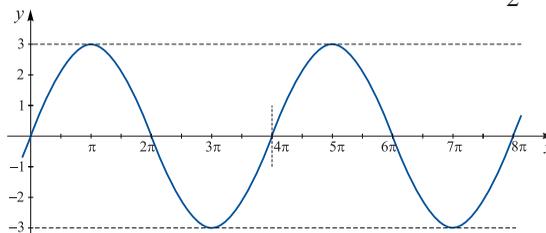


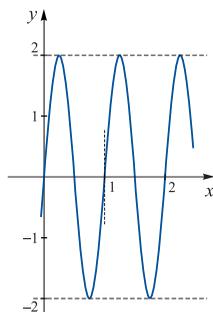
Zadatak 5. Prikaži grafički funkcije:

- 1) $f(x) = 3 \sin \frac{x}{2}$;
- 2) $f(x) = 2 \sin(2\pi x)$;
- 3) $f(x) = -\frac{1}{2} \sin\left(\frac{3\pi}{4}x + \frac{\pi}{4}\right)$;
- 4) $f(x) = \frac{3}{2} \sin\left(3x - \frac{\pi}{4}\right)$.

Rješenje. 1) $f(x) = 3 \sin \frac{x}{2} \implies$ nultočka $N = 0$, $C = 3$, $P = \frac{2\pi}{\frac{1}{2}} = 4\pi$



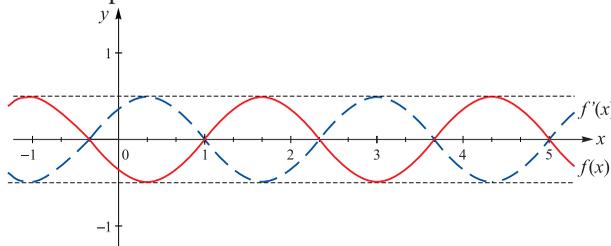
2) $f(x) = 2 \sin(2\pi x) \implies$ nultočka $N = 0$, $C = 2$, $P = \frac{2\pi}{2\pi} = 1$



3) $f(x) = -\frac{1}{2} \sin\left(\frac{3\pi}{4}x + \frac{\pi}{4}\right)$

$$f'(x) = \frac{1}{2} \sin\left(\frac{3\pi}{4}x + \frac{\pi}{4}\right) \implies N = -\frac{\frac{\pi}{4}}{\frac{3\pi}{4}} = -\frac{1}{3}, \quad C = \frac{1}{2}, \quad P = \frac{2\pi}{\frac{3\pi}{4}} = \frac{8}{3}.$$

Prvo crtamo graf funkcije f' . Graf funkcije f je simetričan grafu funkcije f' s obzirom na os apscisa.



$$4) f(x) = \frac{3}{2} \sin\left(3x - \frac{\pi}{4}\right) \implies N = -\frac{-\pi}{3} = \frac{\pi}{12}, \quad C = \frac{3}{2}, \quad P = \frac{2\pi}{3}.$$

