

Zadatak 16. Ako je $f(x) = \sin(\pi x)$, $g(x) = \frac{1}{3}x + 1$, izračunaj $(f \circ g)(-13)$ i $(g \circ f)(-13)$.

Rješenje. $f(x) = \sin(\pi x)$, $g(x) = \frac{1}{3}x + 1$;

$$(f \circ g)(-13) = \sin\left[\pi\left(\frac{1}{3} \cdot (-13) + 1\right)\right] = \sin\left(-\frac{10}{3}\pi\right) = \sin\left(\frac{2\pi}{3}\right) = \frac{\sqrt{3}}{2};$$

$$(g \circ f)(-13) = \frac{1}{3} \cdot \sin(-13\pi) + 1 = 1.$$