

Zadatak 40. Ako je $f(x) = \sin(x - 1)\frac{\pi}{6}$, $g(x) = |2x + 1|$, koliko je $(g \circ f)(333)$?

Rješenje. $f(x) = \sin(x - 1)\frac{\pi}{6}$, $g(x) = |2x + 1|$

$$\begin{aligned}(g \circ f)(x) &= \left| 2 \sin(x - 1)\frac{\pi}{6} + 1 \right| \\(g \circ f)(333) &= \left| 2 \sin 332 \cdot \frac{\pi}{6} + 1 \right| = \left| 2 \sin \frac{4\pi}{3} + 1 \right| \\&= \left| 1 + 2 \cdot \left(-\frac{\sqrt{3}}{2} \right) \right| = |1 - \sqrt{3}| = \sqrt{3} - 1.\end{aligned}$$