② $f(x) = x^5 - 16x$

$g(x) = \sin \frac{\pi}{2} x$

C.E.

$f(x) \quad \forall x \in \mathbb{R}$

$g(x) \quad \forall x \in \mathbb{R}$

$f(x) = 0 \quad \begin{cases} x = 0 \\ x = \pm 4 \end{cases}$ INT. ASSI

$g(x) = 0 \quad \begin{cases} x = 2k \quad k \in \mathbb{Z} \end{cases}$

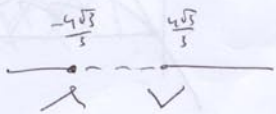
$f(0) = 0$

$g(0) = 0$

$f'(x) = 3x^2 - 16 \qquad f'(x) = 0 \qquad x = \pm \frac{4\sqrt{3}}{3}$ → STUDIO DERIVATE

$g'(x) = \frac{\pi}{2} \cos \frac{\pi}{2} x \qquad g'(x) = 0 \qquad x = 2k + 1 \qquad k \in \mathbb{Z}$

SEGNO $f'(x)$



SEGNO $g'(x)$