Composition de fonctions : Exemple

Soit $f(x) = \sqrt{x^2 + 1}$ et $g(x) = \sqrt{x}$; $avec\ x \geq 0$

$$f \circ g(x) = f(g(x))$$

$$f \circ g(x) = \sqrt{(g(x))^2 + 1}$$

$$f \circ g(x) = \sqrt{(\sqrt{x})^2 + 1}$$

$$f \circ g(x) = \sqrt{x + 1}$$

$$g \circ f(x) = g(f(x))$$

$$g \circ f(x) = \sqrt{f(x)}$$

$$g \circ f(x) = \sqrt{\sqrt{x^2 + 1}}$$

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