

$$1) \quad f(g(h(x))) = \sqrt{\ln(x^2 + 2)} \Rightarrow f(x) = \sqrt{x}, \quad g(x) = \ln x \text{ και } h(x) = x^2 + 2$$

$$2) \quad (g(h(x))) = \sigma\nu\nu(\eta\mu(2x^2 - 5)) \Rightarrow f(x) = \sigma\nu\nu x, \quad g(x) = \eta\mu x \text{ και } h(x) =$$

$$3) \quad (g(h(x))) = e^{\sigma\varphi \frac{1}{x}} \Rightarrow f(x) = e^x, \quad g(x) = \sigma\varphi x \text{ και } h(x) = \frac{1}{x}$$

$$4) \quad (g(h(x))) = \ln(\varepsilon\varphi(x^2 + x + 1)) \Rightarrow f(x) = \ln x, \quad g(x) = \varepsilon\varphi x \text{ και } h(x) = x^2 + x + 1$$

$$5) \quad f(g(h(\varphi(x)))) = 2\sigma\nu\nu^3(\sqrt{x+1} + 2) \Rightarrow$$

$$\Rightarrow f(x) = 2x^3, \quad g(x) = \sigma\nu\nu x, \quad h(x) = \sqrt{x} + 2 \text{ και } \varphi(x) = x - 1$$

$$6) \quad f(g(h(\varphi(\sigma(x))))) = \eta\mu^2\left(\frac{1}{\sqrt{x^2 + 5}}\right) \Rightarrow$$

$$\Rightarrow f(x) = x^2, \quad g(x) = \eta\mu x, \quad h(x) = \frac{1}{x}, \quad \varphi(x) = \sqrt{x} \text{ και } \sigma(x) = x^2 + 5$$