

פונקציונליות

$$f: \mathbb{R}^+ \rightarrow \mathbb{R}^+, f(xf(y)) + yf(x) = xf(y) + f(xy) \quad .1$$

$$f(x^2) - f(y^2) \leq (y + f(x))(x - f(y)) \quad .2$$

$$f: \mathbb{R}^+ \rightarrow \mathbb{R}^+, (z + 1)f(x + y) = f(xf(z) + y) + f(yf(z) + x) \quad .3$$

$$f: \mathbb{R}^+ \rightarrow \mathbb{R}^+, f(f(x) + xf(y)) = xy + f(x) \quad .4$$

$$f(yf(x) + f(x)f(y)) = xf(y) + f(xy) \quad .5$$

$$f(x^2 + y + f(y)) = 2y + f(x)^2 \quad .6$$

$$|y - f(f(x))| \geq |(f(x))^2 + xf(y)| \quad .7$$

$$f(xf(y)) + f(y) = f(x + y) + f(xy) \quad .8$$

$$f(x + yf(x)) + f(xf(y) - y) = f(x) - f(y) + 2xy \quad .9$$

$$f: \mathbb{R}^+ \rightarrow \mathbb{R}^+, f(1 + xf(y)) = yf(x + y) \quad .10$$

בתאבון!