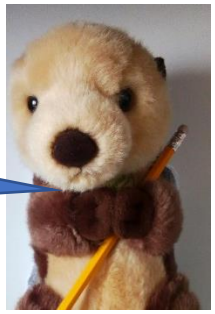
פונקציונלי זה חיובי!



1. $f:\mathbb{R}^+ \to \mathbb{R}^+ \quad f\left(\frac{f(y)}{f(x)}+1\right)=f\left(x+\frac{y}{x}+1\right)-f(x)$

2. $f:\mathbb{R}^+ \to \mathbb{R}^+ \quad f\big(x+f(y)\big)=yf(xy+1)$

3. $f:\mathbb{R}^+ \to \mathbb{R}^+ \quad f\big(xf(y)\big)=f(x+y)$

4. $f:\mathbb{R}^+ \to \mathbb{R}^+ (z+1)f(x+y)=f(xf(z)+y)+f(yf(z)+x)$

5. $f:\mathbb{Q}^+ \to \mathbb{Q}^+ \quad f\big(xf(x)+f(y)\big)=f(x)^2+y$

6. $f:\mathbb{R}^+ \to \mathbb{R}^+ \; f\big(f(x)+xf(y)\big)=xy+f(x)$

7. $f:\mathbb{R} \to \mathbb{R} \quad f(f(x)^2-y^2)^2+f(2xy)^2=f(x^2+y^2)^2$

8. $f:\mathbb{R}^+ \to \mathbb{R}^+ \quad f\big(1+xf(y)\big)=yf(x+y)$

בתאבון!