

17.14

$$\text{Έχουμε: } \eta\mu^2\omega + \sigma\upsilon\nu^2\omega = 1 \Leftrightarrow \left(\frac{x+1}{3x-1}\right)^2 + \left(\frac{2x}{3x-1}\right)^2 = 1 \Leftrightarrow$$

$$\Leftrightarrow \frac{x^2+2x+1}{9x^2-6x+1} + \frac{4x^2}{9x^2-6x+1} = 1 \Leftrightarrow \frac{5x^2+2x+1}{9x^2-6x+1} = 1 \Leftrightarrow$$

$$\Leftrightarrow 5x^2+2x+1 = 9x^2-6x+1 \Leftrightarrow 4x^2-8x = 0 \Leftrightarrow$$

$$\Leftrightarrow 4x(x-2) = 0 \Leftrightarrow x = 0 \text{ ή } x = 2$$