

6

$$\text{using } x=3, y=40$$

$$X_H = [0, 1000]$$

tedy:

$$u := 9$$

$$u := 1609$$

$$d = 40, 1123$$

$$d \in X_H, u \notin X_H$$

lepiej

$$a := \left(\frac{x}{\max(x, y)} \right)^2$$

$$b := \left(\frac{y}{\max(x, y)} \right)^2$$

$$c := \sqrt{a+b}$$

$$d := \max(x, y) \cdot c$$

tedy:

$$a = \left(\frac{3}{40} \right)^2 < 1$$

$$b = \left(\frac{40}{40} \right)^2 = 1$$

$$c = \sqrt{\left(\frac{3}{40} \right)^2 + \left(\frac{40}{40} \right)^2}$$

$$d = 40 \cdot \sqrt{\left(\frac{3}{40} \right)^2 + \left(\frac{40}{40} \right)^2}$$

$$v = (v_1, v_2, v_3, \dots, v_n)$$

$$m = \max(v_1, v_2, \dots, v_n)$$

$$s = \left(\frac{v_1}{m} \right)^2$$

$$s = s + \left(\frac{v_n}{m} \right)^2 \quad \text{dla } n \in [2; n] \quad n \in \mathbb{N}$$

$$p = \sqrt{s}$$

$$d = m \cdot p$$