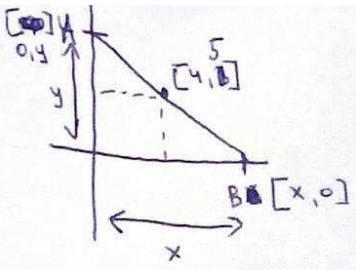


$x > 4$
$y > 5$

PODOBNOST: $\frac{x}{y} = \frac{x-4}{5}$

$y = \frac{5x}{x-4}$

$D(\alpha) = x + y$

$D(\alpha) = x + \frac{5x}{x-4}$

$D(\alpha) = \frac{x^2 - 4x + 5x}{x-4}$

$D(\alpha) = \frac{x^2 + x}{x-4}$

$D'(\alpha) = \frac{(x^2+x)' \cdot (x-4) - (x^2+x)(x-4)'}{(x-4)^2}$

$D'(\alpha) = \frac{(2x+1)(x-4) - (x^2+x)}{(x-4)^2} = \frac{2x^2 - 7x - 4 - x^2 - x}{(x-4)^2}$

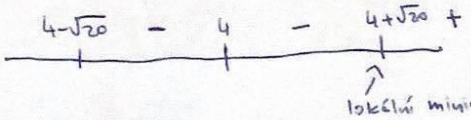
$D'(\alpha) = \frac{x^2 - 8x - 4}{(x-4)^2}$

Extrémy:

$x_1 = 4$

$x^2 - 8x - 4 = 0$

$\frac{+8 \pm \sqrt{64+16}}{2}$ / $4 + \sqrt{20} = x_2$ \ $4 - \sqrt{20} = x_3$



parametrické vyjádření přímky:

$p: x = 4 + (4 + \sqrt{20})t$
$y = 3 + (9 + 4\sqrt{5})t$

$D(\alpha) = x + \frac{5x}{x-4}$

$= 4 + \sqrt{20} + \frac{5(4+\sqrt{20})}{\sqrt{20}}$

$= 9 + 4\sqrt{5}$