

ZAD8e

PROSTA AD

$$y = 2x + 5$$

$$y = -x + 2$$

$$-x + 2 = 2x + 5$$

$$-x - 2x = 5 - 2$$

$$-3x = 3 \quad :|-3$$

$$x = -1$$

$$y = 1 + 2 = 3$$

$$P \begin{pmatrix} x_p & y_p \\ -1 & 3 \end{pmatrix}$$

PROSTA AB $y = -1$

PROSTA PROSTOPADŁA DO AB I PIEREKODZIWA PIMEŁ
PUNKT P

$$x = -1$$

PUNKT PIEREKIĘCIA PROSTEJ AB I PROSTEJ PROSTOPADŁEJ

$$\text{TO } S \begin{pmatrix} x_s & y_s \\ -1 & -1 \end{pmatrix}$$

ODLĘKAT DRUGIĆ ODŁĘKATA AB

$$|AB| = \sqrt{(x_B - x_A)^2 + (y_B - y_A)^2}$$

$$A \begin{pmatrix} x_A & y_A \\ -3 & -1 \end{pmatrix}$$

$$B \begin{pmatrix} x_B & y_B \\ 3 & -1 \end{pmatrix}$$

$$|AB| = \sqrt{(3+3)^2 + (-1+1)^2} = \sqrt{6^2 + 0} = 6$$

PROSTA- WYSOKOŚĆ TRÓJKĄTA

$$|PS| = \sqrt{(x_s - x_p)^2 + (y_s - y_p)^2} = \sqrt{(-1+1)^2 + (-1-3)^2} = \sqrt{0^2 + (-4)^2} = \sqrt{16} = 4$$

$$P_{\triangle ABP} = \frac{1}{2} |AB| |PS| = \frac{1}{2} \cdot 6 \cdot 4 = 12$$