

27.11.20. Лінійна теорема у координатній системі

$$A(x_1, y_1), B(x_2, y_2)$$

398. б) $A(1, 9), B(4, 3)$
 x_1, y_1 x_2, y_2

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

$$x_1 = 1, x_2 = 4$$

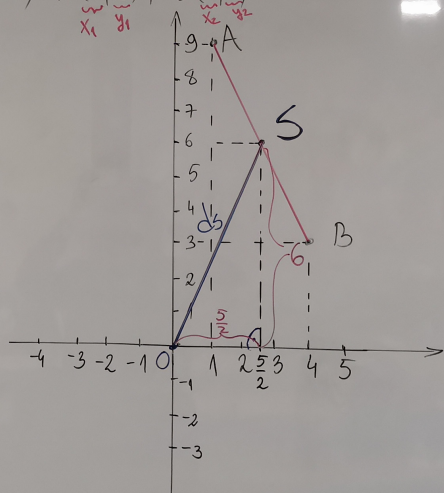
$$(x_1 - x_2)^2 = (1 - 4)^2 = (-3)^2 = 9 = 36$$

$$(y_2 - y_1)^2 = (3 - 9)^2 = (-6)^2 = 36$$

$$A(x_1, y_1), B(x_2, y_2)$$

$S \leftarrow$ середнє дуття

$$S \left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$$



$$S \left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$$

$$S \left(\frac{1+4}{2}, \frac{9+3}{2} \right)$$

$$S \left(\frac{5}{2}, 6 \right) \text{ или } S(2,5, 6)$$

$$d_s = |OS|$$

$$d_s^2 = 6^2 + \left(\frac{5}{2}\right)^2$$

$$d_s^2 = \frac{36}{1} + \frac{25}{4}$$

$$d_s^2 = \frac{144}{4} + \frac{25}{4}$$

$$d_s^2 = \frac{169}{4}$$

$$d_s = \sqrt{\frac{169}{4}}$$

$$d_s = \frac{13}{2}$$

27.11.20. Поняття теореми у координатній системі

$A(x_1, y_1), B(x_2, y_2)$

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

$$x_1 = 4, x_2 = -2$$

$$(x_1 - x_2)^2 = (4 - (-2))^2 = (4 + 2)^2 = 6^2 = 36$$

$$(x_2 - x_1)^2 = (-2 - 4)^2 = (-6)^2 = 36$$

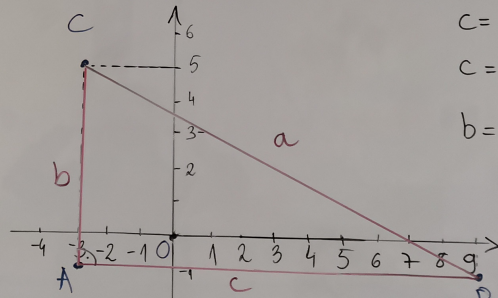
$A(x_1, y_1), B(x_2, y_2)$

$S \leftarrow$ середнє арифметичне

$$S \left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$$

400. В $A(-3, -1), B(9, -1), C(-3, 5)$

$O_{\triangle ABC} = ?$



$$\begin{aligned} O &= a + b + c \\ O &= 6\sqrt{5} + 6 + 12 \\ O &= 6\sqrt{5} + 18 \end{aligned}$$

Значення: $398a$ и $400a$

$$c = |AB| = \sqrt{(9 - (-3))^2 + (-1 - (-1))^2}$$

$$c = \sqrt{(9 + 3)^2 + (-1 + 1)^2}$$

$$c = \sqrt{12^2}$$

$$c = 12$$

$$b = |AC| = \sqrt{(-3 - (-3))^2 + (5 - (-1))^2}$$

$$b = \sqrt{(-3 + 3)^2 + (5 + 1)^2}$$

$$b = \sqrt{6^2}$$

$$b = 6$$

$$a = |BC| = \sqrt{(-3 - 9)^2 + (5 - (-1))^2}$$

$$a = \sqrt{(-12)^2 + (5 + 1)^2} = \sqrt{144 + 36} = \sqrt{180}$$

$$a = \sqrt{180} = \sqrt{36 \cdot 5} = 6\sqrt{5}$$