

S.37/4a

$p_1$  :

$$y = x^2 + 4x + 2,75$$

∴ **quadr. Erg**

$$y = (x+2)^2 - 1,25$$

$$S_1(-2|-1,25)$$

$p_2$  :

$$y = x^2 + 2x + 4$$

∴ **quadr. Erg**

$$y = (x+1)^2 + 3$$

$$S_2(-1|3)$$

$p_1 \cap p_2$

$$x^2 + 4x + 2,75 = x^2 + 2x + 4$$

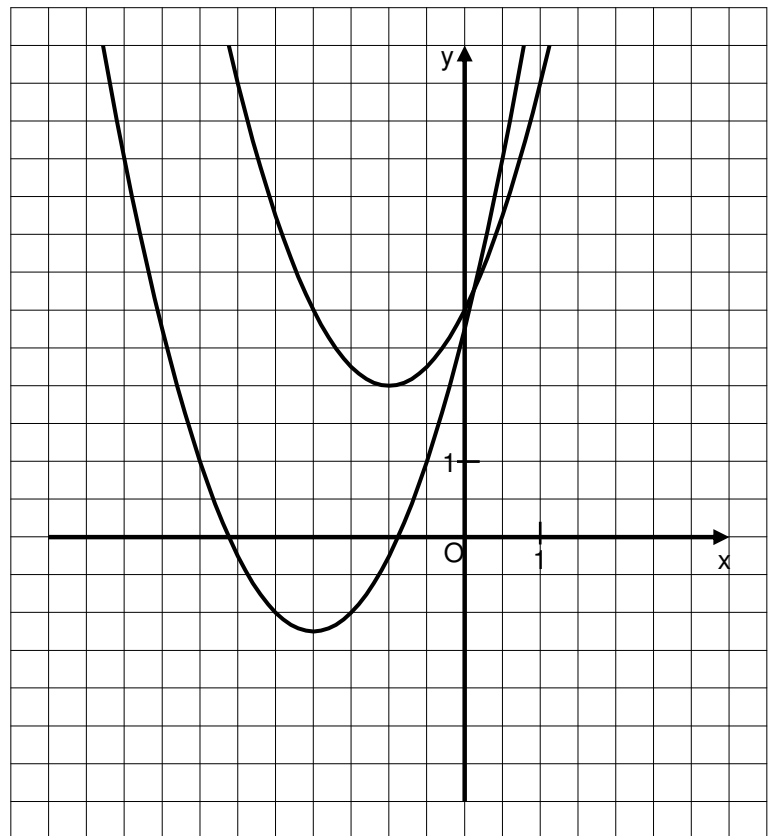
$$x^2 + 4x + 2,75 - x^2 - 2x - 4 = 0$$

$$2x - 1,25 = 0$$

$$2x = 1,25$$

$$x = 0,625$$

$$\mathbb{L} = \{0,625\}$$



**Schnittpunkt/Berührungspunkt: P(0,6 | 5,64)**

S.37/4b

geg.:

$p_1$  :

$$y = -x^2 + 2x + 3$$

$$y = -(x^2 - 2x + 1^2 - 1^2 - 3) :$$

$$y = -(x-1)^2 + 4$$

$$S_1(1|4)$$

$p_2$  :

$$y = x^2 - 4x + 3$$

$$y = (x-2)^2 - 1$$

$$S_2(2|-1)$$

$p_1 \cap p_2$

$$-x^2 + 2x + 3 = x^2 - 4x + 3$$

$$-x^2 + 2x + 3 - x^2 + 4x - 3 = 0$$

$$-2x^2 + 6x = 0$$

$$2x^2 - 6x = 0$$

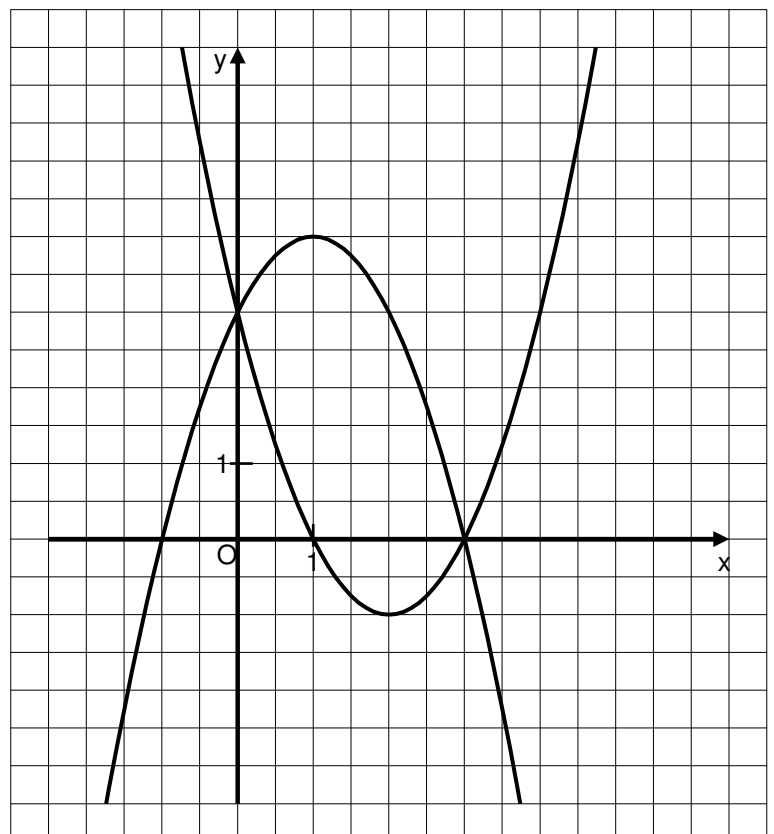
$$2x \cdot (x-3) = 0$$

$$2x = 0 \vee x-3 = 0$$

$$x = 0 \vee x = 3$$

$$\mathbb{L} = \{0; 3\}$$

**Schnittpunkte: P<sub>1</sub> (0 | 3), P<sub>2</sub> (3 | 0)**



S.37/4c

geg.:

$p_1$ :

$$y = -0,5x^2 - 0,5x + 5,25$$

∴

$$y = -0,5(x + 0,5)^2 + 5,375$$

$$S_1(-0,5 | 5,375)$$

$p_2$ :

$$y = x^2 - 4x + 4$$

∴

$$y = (x - 2)^2$$

$$S_2(2 | 0)$$

$p_1 \cap p_2$

$$-0,5x^2 - 0,5x + 5,25 = x^2 - 4x + 4$$

$$-0,5x^2 - 0,5x + 5,25 - x^2 + 4x - 4 = 0$$

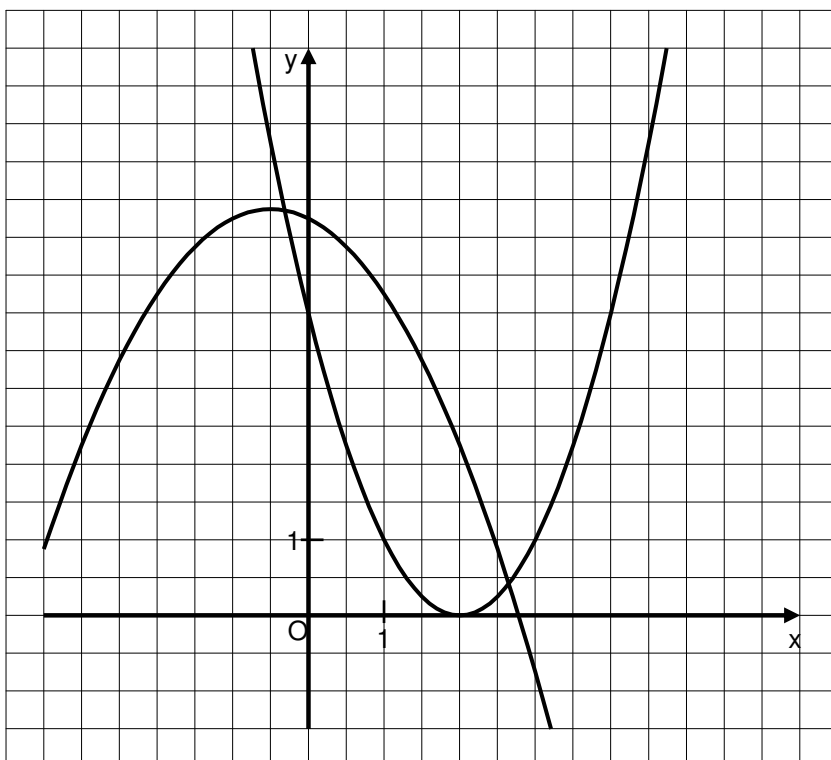
$$-1,5x^2 + 3,5x + 1,25 = 0$$

$$a = -1,5; b = 3,5; c = 1,25$$

$$x_{1/2} = \frac{-3,5 \pm \sqrt{3,5^2 - 4 \cdot (-1,5) \cdot 1,25}}{2 \cdot (-1,5)}$$

$$x_{1/2} = \frac{-3,5 \pm \sqrt{19,75}}{-3}$$

$$x_1 = -0,31 \vee x_2 = 2,65$$



$$\mathbb{L} = \{-0,31; 2,65\}$$

**Schnittpunkte:  $P_1(-0,31 | 5,34)$ ,  $P_2(2,65 | 0,42)$**