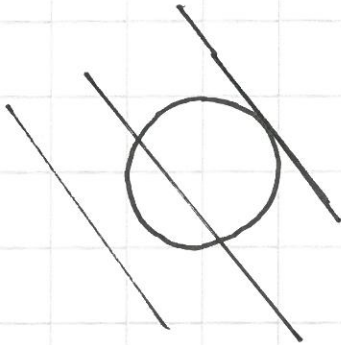
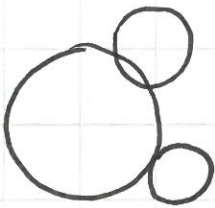


12. YMPYRÄN LEIKKAUSPISTEITÄ



* leikkauspisteet ratkaistaan
yhtälöparilla

* ratkaisuja 0, 1 tai 2



$$\begin{cases} x - 3y + 2 = 0 & \text{suora} \\ x^2 + y^2 = 2 & \text{ympyrä} \end{cases} \quad \begin{array}{l} \text{Sijoita} \\ x \text{ tai } y \end{array}$$

$$x = 3y - 2$$

$$(3y - 2)^2 + y^2 = 2 \quad \text{(ESIM 1)}$$

$$9y^2 - 12y + 4 + y^2 = 2$$

$$10y^2 - 12y + 2 = 0 \quad \text{ratk. kaava}$$

$$\begin{cases} x^2 + y^2 + 4x + 2y + 3 = 0 & \text{(ESIM 2)} \\ x^2 + y^2 - 9 = 0 & \parallel \cdot (-1) \end{cases}$$

$$4x + 2y + 12 = 0$$

jatkun kuten
ympyrä + suora

sanja1

12.2

12.3

12.5

12.6

12.9

12.10

sanja2

12.11

↓