

(зрок 4) задание 17.6.5 - 17.6.8

$$\begin{aligned} & \cdot y^2 - 2x - 2y - 5 = 0 \rightarrow y^2 - 2y + 1 - 2(x+3) = 0 \rightarrow \\ & \rightarrow (y-1)^2 - 2(x+3) = 0 \quad \text{парабола} \end{aligned}$$

$$\begin{aligned} & \cdot 3x^2 + 5y^2 + 12x - 30y + 42 = 0 \rightarrow \\ & \rightarrow 3x^2 + 12x + 12 + 5y^2 - 30y + 45 - 15 = 0 \rightarrow \\ & \rightarrow 3(x+2)^2 + 5(y-3)^2 = 15 \rightarrow \frac{(x+2)^2}{5} + \frac{(y-3)^2}{3} = 1 \\ & \quad \text{эллипс} \end{aligned}$$

$$\begin{aligned} & \cdot 2x^2 - y^2 + 6y - 7 = 0 \rightarrow 2x^2 - (y^2 - 6y + 9) + 2 = 0 \rightarrow \\ & \rightarrow 2x^2 - (y-3)^2 = -2 \rightarrow \frac{(y-3)^2}{2} - \frac{x^2}{1} = 1 \quad \text{гипербола} \end{aligned}$$

$$\begin{aligned} & \cdot 2x^2 - 3y^2 - 28x - 42y - 55 = 0 \rightarrow \\ & \rightarrow 2x^2 - 28x + 98 - 3y^2 - 42y - 147 - 6 = 0 \rightarrow \\ & \rightarrow 2(x-7)^2 - 3(y+7)^2 = 6 \rightarrow \frac{(x-7)^2}{3} - \frac{(y+7)^2}{2} = 1 \\ & \quad \text{гипербола} \end{aligned}$$