17.6.5 $y^2 - 2x - 2y - 5 = 0$

$(y^2 - 2y + 1) - 2x - 6 = 0$

$(y-1)^2 = 2(x-3)$ – парабола с центром $(3,1)$ и $p = 1$

17.6.6 $3x^2 + 5y^2 + 12x - 30y + 42 = 0$

$3(x^2 + 4x + 4) + 5(y^2 - 6y + 9) - 15 = 0$

$12 \qquad 45$

$3(x+2)^2 + 5(y-3)^2 = 15$

$\frac{(x+2)^2}{5} + \frac{(y-3)^2}{3} = 1$ – эллипс с центром $(-2,3)$ и $a = \sqrt{5}$, $b = \sqrt{3}$

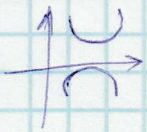
17.6.7 $2x^2 - y^2 + 6y - 7 = 0$

$2x^2 - (y^2 - 6y + 9) + 2 = 0$

$2x^2 - (y-3)^2 = -2$

$x^2 - \frac{(y-3)^2}{2} = -1$

$-\frac{x^2}{1} + \frac{(y-3)^2}{2} = 1$ – гипербола с центром $(0,3)$ и $a = 1$, $b = \sqrt{2}$



17.6.8 $2x^2 - 3y^2 - 28x - 42y - 55 = 0$

$2(x^2 - 14x + 49) - 3(y^2 + 14y + 49) - 6 = 0$

$2(x-7)^2 - 3(y+7)^2 = 6$

$\frac{(x-7)^2}{3} - \frac{(y+7)^2}{2} = 1$ – гипербола с центром $(7,-7)$ и $a = \sqrt{3}$, $b = \sqrt{2}$