$$\begin{cases} x - y + 1 = 0 \\ x^2 - 2y^2 = 0 \end{cases}$$

$$x = y - 1$$

$$(y-1)^2 - 2y^2 = 0$$

$$y^2 - 2y + 1 - 2y^2 = 0$$

$$y^2 + 2y - 1 = 0$$

$$y = \frac{-2 \pm \sqrt{8}}{2} = -1 \pm \sqrt{2}$$

$$x = -2 \pm \sqrt{2}$$

$$S' = \left\{ \left(-1 + \sqrt{2} \, ; \, -2 + \sqrt{2} \right) ; \left(-1 - \sqrt{2} \, ; \, -2 - \sqrt{2} \right) \right\}$$

$\boxed{2.5.22}$

a) $\quad 2xy - 3y = 3$

$\quad 2xy = 3y+3 \quad / \quad x = \dfrac{3y+3}{2y} \quad$ si' $y \neq 0$

$\quad (y=0$ ne donne pas de sol. $)$

$\quad y^2 - 4xy = -15$

$\quad y(2x-3) = 3$

$\boxed{\text{si' } x = \dfrac{3}{2}} \quad 0 = 3 \quad \downarrow$

On peut supposer $x \neq \dfrac{3}{2}$ et diviser par $2x-3$:

$y = \dfrac{3}{2x-3}$

Idée: $\quad 2xy - 3y = 3$

$\quad xy = \dfrac{3y+3}{2}$

$\quad y^2 - 4xy = -15$

$\quad y^2 - 4 \cdot \dfrac{3y+3}{2} = -15$

$\quad y^2 - 6y - 6 = -15$

$$y^2 - 6y + 9 = 0$$

$$(y-3)^2 = 0 \qquad y = 3 \qquad x = 2$$

$$S = \{(2; 3)\}$$