DATA

B.80 - Resolução:

$$\begin{cases} x^{y^2-15y+56} = 1 \\ y - x = 5 \end{cases} \Rightarrow y = 5 + x$$

$$x^{(5+x)^2-15\cdot(5+x)+56} = 1$$

$$(5+x)^2 - 15\cdot(5+x) + 56 = 0$$

$$5^2 + 10x + x^2 - 75 - 15x + 56 = 0$$

$$25 - 5x + x^2 - 75 + 56 = 0$$

$$x^2 - 5x + 6 = 0$$

$$\Delta = (-5)^2 - 4\cdot 1\cdot 6$$

$$\Delta = 25 - 24$$

$$\Delta = 1 \qquad \Delta > 0 \qquad \sqrt{\Delta} = 1$$

$$x = \frac{5 \pm 1}{2} \Rightarrow x_1 = 3 \quad \text{e} \quad x_2 = 2$$

$$S = \{2, 3\} //$$