

V  $\mathcal{A}_3$  určete vzájemnou polohu podprostorů:

1.

$$\alpha : x_1 + x_2 - x_3 + 1 = 0 \qquad p : \begin{aligned} x_1 - x_2 &= 0 \\ 2x_2 - x_3 - 1 &= 0 \end{aligned}$$

2.

$$p : \begin{aligned} x_1 &= 3 + t \\ x_2 &= -5 + 2t \\ x_3 &= -1 + 3t \end{aligned} \qquad q : \begin{aligned} x_1 &= 4s \\ x_2 &= -2 - s \\ x_3 &= 2 \end{aligned}$$

3.

$$\alpha : x_1 + 2x_2 - 3x_3 + 4 = 0 \qquad \beta : \begin{aligned} x_1 &= -1 + t + 3s \\ x_2 &= t \\ x_3 &= 1 + t + s \end{aligned}$$