

S. 306 Nr. 1

$A(3|a_2|0)$

$$\alpha(A; E) = 5$$

$$E: 2x_1 + x_2 - 2x_3 = 4$$

HNF

$$\left| \frac{2 \cdot 3 + a_2 - 0 - 4}{\sqrt{2^2 + 1^2 + (-2)^2}} \right| = d \stackrel{!}{=} 5$$

$$\left| \frac{2+a}{\sqrt{9}} \right| = 5$$

$$\frac{2+a}{3} = 5 \quad | \cdot 3$$

$$2+a = 15 \quad | -2$$

$$a = 13$$

$$\left| \frac{2+a}{\sqrt{9}} \right| = 15$$

$$\frac{2+a}{3} = -5$$

$$2+a = -15 \quad | -2$$

$$a_2 = -17$$

$A_1(3|13|0)$

$A_2(3|-17|0)$