

$$1. \left(\begin{array}{ccc|c} -1 & 2 & 1 & -1 \\ 2 & 0 & 1 & 7 \\ 1 & 3 & -1 & -4 \end{array} \right) \sim \left(\begin{array}{ccc|c} -1 & 2 & 1 & -1 \\ 0 & 4 & 3 & 5 \\ 0 & 5 & 0 & -5 \end{array} \right)$$

$$\sim \underline{x_2 = -1};$$

$$-4 + 3x_3 = 5$$

$$x_3 = 9:3$$

$$\underline{x_3 = 3},$$

$$2x_1 = 7 - 3$$

$$\underline{x_1 = 2},$$

$$\vec{a} \{2; -1; 3\}_{\overline{pq}\overline{r}}$$

$$2. \vec{a} = \begin{pmatrix} -1 \\ 4 \\ 2 \end{pmatrix}; \vec{b} = \begin{pmatrix} 3 \\ -2 \\ 6 \end{pmatrix}$$

$$2\vec{a} - \vec{b} = \begin{pmatrix} -2 \\ 8 \\ 4 \end{pmatrix} - \begin{pmatrix} 3 \\ -2 \\ 6 \end{pmatrix} = \begin{pmatrix} -5 \\ 10 \\ -2 \end{pmatrix}$$

$$3\vec{b} - 6\vec{a} = -3(2\vec{a} - \vec{b}) \Rightarrow (3\vec{b} - 6\vec{a}) \parallel (2\vec{a} - \vec{b})$$

За, коллинеарны!