

$$\left[\begin{array}{cccc|c} 1 & -1 & -2 & 2 & -1 \\ -3 & 4 & 7 & -12 & 2 \\ 2 & -4 & -3 & -2 & -12 \\ 5 & -1 & -3 & -31 & -20 \end{array} \right]$$

$$\left[\begin{array}{cccc|c} 1 & -1 & -2 & 2 & -1 \\ 0 & 1 & 1 & -6 & -1 \\ 0 & -2 & 1 & -6 & -10 \\ 0 & 4 & 7 & -41 & -15 \end{array} \right]$$

$$\left[\begin{array}{cccc|c} 1 & -1 & -2 & 2 & -1 \\ 0 & 1 & 1 & -6 & -1 \\ 0 & 0 & 3 & -18 & -12 \\ 0 & 0 & 3 & -17 & -11 \end{array} \right]$$

$$\left[\begin{array}{cccc|c} 1 & -1 & -2 & 2 & -1 \\ 0 & 1 & 1 & -6 & -1 \\ 0 & 0 & 1 & -6 & -4 \\ 0 & 0 & 0 & 1 & 1 \end{array} \right]$$

$$\left[\begin{array}{cccc|c} 1 & -1 & -2 & 0 & -3 \\ 0 & 1 & 1 & 0 & 5 \\ 0 & 0 & 1 & 0 & 2 \\ 0 & 0 & 0 & 1 & 1 \end{array} \right]$$

$$\left[\begin{array}{cccc|c} 1 & -1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 0 & 2 \\ 0 & 0 & 0 & 1 & 1 \end{array} \right]$$

$$\left[\begin{array}{cccc|c} 1 & 0 & 0 & 0 & 4 \\ 0 & 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 0 & 2 \\ 0 & 0 & 0 & 1 & 1 \end{array} \right]$$

$x = 4$
 $y = 3$
 $z = 2$
 $w = 1$