



$$\begin{aligned} a + 3c &= 10 \\ +3c &= -7 \end{aligned} \Rightarrow \begin{cases} a = 17 \\ c = -\frac{7}{3} \end{cases}$$

$$ad - bc = -8 \Rightarrow 17d + \frac{7}{3}b = -8$$

$$a(1+d) - c(-3+b)$$

$$\Rightarrow ad + d + 3c - bc$$

$$\Rightarrow ad - bc = -3c + d = 24$$

$$n = 5 \quad \det(A) = -3$$

$$\begin{pmatrix} 4 & -5 \\ -2 & -1 \end{pmatrix} \begin{matrix} x \\ y \end{matrix} = \begin{pmatrix} -21 \\ 7 \end{pmatrix}$$

$$D = \begin{vmatrix} 4 & -5 \\ -2 & -1 \end{vmatrix} = -14$$

$$D_x = \begin{vmatrix} -21 & -5 \\ 7 & -1 \end{vmatrix} = 86$$

$$D_y = \begin{vmatrix} 4 & -21 \\ -2 & 7 \end{vmatrix} = -14$$

$$\frac{D_x}{D} = \frac{-86}{-14} = \frac{43}{7}$$

$$\begin{array}{ccc|c} x & y & z & \\ 3 & -2 & 1 & -19 \\ 2 & -4 & -5 & -9 \\ 5 & -1 & -6 & 3 \end{array}$$

$$D = \begin{vmatrix} 3 & -2 & 1 \\ 2 & -4 & -5 \\ 5 & -1 & -6 \end{vmatrix} = 101$$

$$D_x = \begin{vmatrix} -19 & -2 & 1 \\ -9 & -4 & -5 \\ 3 & -1 & -6 \end{vmatrix} = -202$$

$$D_y = \begin{vmatrix} 3 & 1 & -19 \\ 2 & 5 & -9 \\ 5 & -6 & -3 \end{vmatrix} = 457$$

$$D_z = \begin{vmatrix} & & \\ & & \\ & & \end{vmatrix} =$$