Chapter 6 Determinants Ex 6.4 Q5

$$\text{Let } D = \begin{vmatrix} 2 & -1 \\ 3 & 4 \end{vmatrix} = 11$$

$$D_1 = \begin{vmatrix} -2 & -1 \\ 3 & 4 \end{vmatrix} = -5$$

$$D_2 = \begin{vmatrix} 2 & -2 \\ 3 & 3 \end{vmatrix} = 12$$

$$x = \frac{D_1}{D} = \frac{-5}{11}$$

$$y = \frac{D_2}{D} = \frac{12}{11}$$

Chapter 6 Determinants Ex 6.4 Q6

$$\text{Let } D = \begin{vmatrix} 3 & a \\ 2 & a \end{vmatrix} = a$$

$$D_1 = \begin{vmatrix} 4 & a \\ 2 & a \end{vmatrix} = 2a$$

$$D_2 = \begin{vmatrix} 3 & 4 \\ 4 & 2 \end{vmatrix} = -2$$

$$x = \frac{D_1}{D} = \frac{2a}{a} = 2$$

$$y = \frac{D_2}{D} = \frac{-2}{a}$$

Chapter 6 Determinants Ex 6.4 Q7

$$\text{Let } D = \begin{vmatrix} 2 & 3 \\ 1 & 6 \end{vmatrix} = 9$$

$$D_1 = \begin{vmatrix} 10 & 3 \\ 4 & 6 \end{vmatrix} = 48$$

$$D_2 = \begin{vmatrix} 2 & 10 \\ 1 & 4 \end{vmatrix} = -2$$

$$x = \frac{D_1}{D} = \frac{48}{9} = \frac{16}{3}$$

$$y = \frac{D_2}{D} = \frac{-2}{9}$$

Chapter 6 Determinants Ex 6.4 Q8

$$\text{Let } D = \begin{vmatrix} 5 & 7 \\ 4 & 6 \end{vmatrix} = 2$$

$$D_1 = \begin{vmatrix} -2 & 7 \\ -3 & 6 \end{vmatrix} = 9$$

$$D_2 = \begin{vmatrix} 5 & -2 \\ 4 & -3 \end{vmatrix} = -7$$

$$x = \frac{D_1}{D} = \frac{9}{2}$$

$$y = \frac{D_2}{D} = \frac{-7}{2}$$

********** END **********