

8.3.D1 ~ Determinants & Cramer's Rule

Past due on _____ Period _____

Find the value of each determinant.

1) $\begin{vmatrix} 2 & -5 \\ -2 & 4 \end{vmatrix}$

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

3) $\begin{vmatrix} -6 & 4 \\ 4 & 4 \end{vmatrix}$

4) $\begin{vmatrix} -5 & -8 \\ -6 & -1 \end{vmatrix}$

5) $\begin{vmatrix} 11 & -13 \\ 1 & -4 \end{vmatrix}$

6) $\begin{vmatrix} 9 & 2 \\ 4 & 16 \end{vmatrix}$

Find the values of D , D_x , and D_y . Use Cramer's Rule to solve each system of equations.

7)
$$\begin{aligned} -x + 3y &= -16 \\ 2x - 2y &= 16 \end{aligned}$$

8)
$$\begin{aligned} 2x + 6y &= -24 \\ -4x - 3y &= -6 \end{aligned}$$

9)
$$\begin{aligned} 2x - 10y &= -2 \\ -6x + 4y &= 58 \end{aligned}$$

10)
$$\begin{aligned} -6x + 6y &= -18 \\ x - 4y &= 36 \end{aligned}$$

$$\begin{aligned} 11) \quad & 9x + 10y = 9 \\ & 6x - 10y = -2 \end{aligned}$$

$$\begin{aligned} 12) \quad & -2x - 10y = 10 \\ & 7x + 5y = -26 \end{aligned}$$