Determinants and Cramer's Rule

1. Evaluate each determinant
(similar to p.616 #4)

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

2. Evaluate each determinant
(similar to p.616 #8)

$$\begin{vmatrix} 1/3 & 2/7 \\ -7 & 3 \end{vmatrix}$$

3. Use Cramer's rule to solve each system or to determine that the system is inconsistent or contains dependent equations
(similar to p.616 #14)

$$7x - 2y = 33$$
$$3x + 4y = 19$$

4. Use Cramer's rule to solve each system or to determine that the system is inconsistent or contains dependent equations
(similar to p.616 #24)

$$3x - y = 2$$
$$6x = 4 + 2y$$

5. Use Cramer's rule to solve each system or to determine that the system is inconsistent or contains dependent equations
(similar to p.616 #26)

$$x + 5y = 3$$
$$15y = 7 - 3x$$

6. Evaluate each determinant
(similar to p.616 #32)

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

7. Use Cramer's rule to solve each system
(similar to p.616 #34)

$$\begin{aligned} x - 2y + z &= 3 \\ 3x + y - 2z &= 1 \\ -x - y + 4z &= 9 \end{aligned}$$

8. Evaluate each determinant
(similar to p.616 #44)

$$\begin{vmatrix} 2 & 1 & 3 & 1 \\ -2 & -1 & 4 & -2 \\ 3 & 0 & 2 & 0 \\ 4 & 5 & -1 & 1 \end{vmatrix}$$