

1. Evaluate using the “2 column method”

$$\begin{vmatrix} -3 & 4 & 6 \\ 1 & 2 & -1 \\ -1 & -1 & 2 \end{vmatrix}$$



2. Verify that  $(4, -1, -3)$  is the solution to:

$$2x + 5y + 3z = -6$$

$$x - y + z = 2$$

$$-4x + 3y - 6z = -1$$



3. What comes next in the pattern?

a) 27, 21, 15, 9, ...

b) -2, 8, -32, 128

c) -12, -9, -6, -3, ...

d)  $\frac{1}{8}, \frac{1}{4}, \frac{3}{8}, \frac{1}{2}, \dots$