

Answer on Question #55843 – Math – Linear Algebra

6. Compute the determinant of :

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

Solution

$$\begin{vmatrix} -2 & -3 \\ 1 & 4 \end{vmatrix} = -2 \cdot 4 - 1 \cdot (-3) = -8 + 3 = -5$$

Answer: -5.

7. Compute the determinant of :

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

Solution

$$\begin{vmatrix} -1 & -4 \\ -1 & -2 \end{vmatrix} = -1 \cdot (-2) - (-1) \cdot (-4) = 2 - 4 = -2$$

Answer: -2.

8. Two systems of linear equations involving the same variables are said to be _____ if they have the same solution set.

set

associative

equivalent

parallel

Answer: equivalent

9. $A + (B + C) = (A + B) + C$

associative

scalar quantity

dot product

Answer: associative

10. $A + B = B + A$

associative

m

commutative

m-n

Answer: commutative