

Math 3E HW #6

Answers must be submitted on Moodle by 11AM on Thursday, April 14th.

Good luck!

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Compute the determinant of the matrix.

1) $\begin{bmatrix} 7 & 5 & 9 \\ 4 & 5 & 7 \\ 6 & 3 & 4 \end{bmatrix}$ 1) _____
A) -39 B) 955 C) -459 D) 39

2) $\begin{bmatrix} 6 & -9 & 7 \\ 0 & 1 & 1 \\ 0 & 0 & -8 \end{bmatrix}$ 2) _____
A) 39 B) 48 C) -48 D) -57

3) $\begin{bmatrix} -5 & 5 & -5 & 3 \\ 0 & -1 & 2 & -2 \\ 0 & 3 & 0 & 0 \\ 0 & -3 & 1 & 4 \end{bmatrix}$ 3) _____
A) -30 B) -150 C) 0 D) 150

4) $\begin{bmatrix} 2 & -2 & 6 & 4 \\ 2 & 2 & 7 & 1 \\ 6 & -6 & 14 & 14 \\ -2 & 2 & -6 & 1 \end{bmatrix}$ 4) _____
A) -40 B) -160 C) 80 D) -80

Calculate the area of the parallelogram with the given vertices using the determinant.

5) (0, 0), (5, 8), (13, 10), (8, 2) 5) _____
A) 54 B) 53 C) 108 D) 59