

EG02021 Mathematics
Feedback Quiz 8: Matrix
Total Points 10

Name:

ID:

1. Calculate $C = A + B$

$$A = \begin{bmatrix} 8 & 2 & -7 \\ 9 & -3 & 1 \end{bmatrix}, B = \begin{bmatrix} 6 & -3 & -7 \\ 4 & 0 & 12 \end{bmatrix}$$

2. Find the subtraction between the matrices A and B:

$$A = \begin{bmatrix} 5 & 9 \\ 8 & -4 \\ -3 & 0 \end{bmatrix}, B = \begin{bmatrix} 10 & 21 \\ 7 & -15 \\ 1 & 6 \end{bmatrix}$$

3. Find the product between the two matrices A and B:

$$A = \begin{bmatrix} 1 & -3 & 0 \\ -2 & -1 & 4 \end{bmatrix}, B = \begin{bmatrix} 2 & -1 & 5 \\ 3 & -4 & -5 \end{bmatrix}$$

4. The Leslie matrix G for a bird population consisting of 100 hatchlings and 200 adults can be expressed as below-

$$G = \begin{bmatrix} 0.7 & 1.3 \\ 0.5 & 0.4 \end{bmatrix}, \text{ where the population vector is, } v = \begin{bmatrix} 100 \\ 200 \end{bmatrix}$$

- a) Compute the matrix product Gv .
- b) Interpret the product Gv .