Unique Properties of Matrix Operations - Matching Worksheet

Write the letter of the answer that matches the problem.

1. What are the dimensions of each matrix?

$$A = \begin{bmatrix} 3 \\ 9 \\ 9 \end{bmatrix} + \begin{bmatrix} 0 \\ 1 \\ 0 \end{bmatrix} = \begin{bmatrix} 5 \\ 4 \\ 2 \end{bmatrix}$$

a.

This the sum of how many matrices?

$$\mathsf{B} = \left[\begin{array}{c} 5 \\ 7 \\ 7 \end{array} \right] + \left[\begin{array}{c} 3 \\ 2 \\ 2 \end{array} \right] + \left[\begin{array}{c} 8 \\ 1 \\ 0 \end{array} \right] = \left[\begin{array}{c} 16 \\ 10 \\ 9 \end{array} \right]$$

b.

3. Are the differences defined?

$$\mathsf{L} = \left[\begin{array}{ccc} 4 & 7 \\ 0 & 3 \end{array} \right] \quad - \quad \left[\begin{array}{cccc} 1 & 0 & 0 \\ 1 & 2 & 0 \end{array} \right]$$

C.

4. What are the dimension of matrix

$$P = 3[8 \ 8] - [6 \ 5]$$

d. 3 rows and 1 column



5. Calculate the value of these matrices. e.

$$T = 5[1 \ 2] - [4 \ 12]$$

No- 2 rows and 2 columns and second -2 rows and 3 columns the two matrices do not have the same number of columns.