Math worksheet on *'Matrices - Subtract with Two Scalars (Level 1)'*. Part of a broader unit on *'Matrices'*

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1 Find the resulting matrix for yR - mN when y = 3 and m = 4

$$R = []$$
$$N = []$$

a $[]$

b $undefined$

c $\begin{bmatrix} 3 & 3 \\ 4 & 4 \end{bmatrix}$

2 Find the resulting matrix for dB - mP when d = 4 and m = 3

$$B = \begin{bmatrix} 0 \\ 4 \end{bmatrix} \quad P = \begin{bmatrix} 7 \\ 5 \end{bmatrix}$$

a $\begin{bmatrix} 7 \\ 8 \end{bmatrix}$

b $\begin{bmatrix} -19 \\ 1 \end{bmatrix}$

c $\begin{bmatrix} 4 \\ 8 \end{bmatrix}$

d $\begin{bmatrix} -21 \\ 1 \end{bmatrix}$

e $\begin{bmatrix} 7 \\ 6 \end{bmatrix}$

3 Find the resulting matrix for bC - yN when b = 4 and y = 2

$$C = \begin{bmatrix} 0 & 4 \\ 1 & 9 \\ 1 & 7 \end{bmatrix} \quad N = \begin{bmatrix} 4 & 8 \\ 2 & 0 \\ 9 & 9 \end{bmatrix}$$

a $\begin{bmatrix} -8 & 0 \\ 0 & 36 \\ -14 & 10 \end{bmatrix}$

b $\begin{bmatrix} 9 & 7 \\ 8 & 4 \\ 8 & 8 \end{bmatrix}$

c $\begin{bmatrix} -9 & 0 \\ 0 & 36 \\ -14 & 10 \end{bmatrix}$

d $\begin{bmatrix} 9 & 5 \\ 6 & 0 \\ 2 & 3 \end{bmatrix}$

e $\begin{bmatrix} 0 & 16 \\ 4 & 36 \\ 4 & 28 \\ -8 & -16 \\ -4 & 0 \\ -18 & -18 \end{bmatrix}$

4 Find the resulting matrix for nM - rB when n = 2 and r = 4

$$M = \begin{bmatrix} 0 \\ 5 \\ 9 \end{bmatrix} \quad B = \begin{bmatrix} 9 \\ 5 \\ 5 \end{bmatrix}$$

a $\begin{bmatrix} 0 & -36 \\ 10 & -20 \\ 18 & -20 \end{bmatrix}$

b $\begin{bmatrix} 3 \\ 0 \\ 3 \end{bmatrix}$

c $\begin{bmatrix} 2 \\ 4 \\ 3 \end{bmatrix}$

d $\begin{bmatrix} -36 \\ -10 \\ -2 \end{bmatrix}$

e $\begin{bmatrix} 4 \\ 5 \\ 6 \end{bmatrix}$

5 Find the resulting matrix for pC - dB when p = 2 and d = 2

$$C = \begin{bmatrix} 7 \\ 9 \end{bmatrix} \quad B = \begin{bmatrix} 3 \\ 8 \end{bmatrix}$$

a $\begin{bmatrix} 8 \\ 2 \end{bmatrix}$

b $\begin{bmatrix} 2 & 2 \\ 2 & 2 \end{bmatrix}$

c $\begin{bmatrix} 2 \\ 9 \end{bmatrix}$

d $\begin{bmatrix} 7 \\ 0 \end{bmatrix}$

e $\begin{bmatrix} 14 \\ 18 \\ -6 \\ -16 \end{bmatrix}$

6 Find the resulting matrix for nC - mD when n = 2 and m = 3

$$C = \begin{bmatrix} 2 & 8 & 1 \end{bmatrix}$$
$$D = \begin{bmatrix} 4 & 8 & 1 \end{bmatrix}$$

a $\begin{bmatrix} -8 & -8 & -1 \end{bmatrix}$

b $\begin{bmatrix} 9 & 7 & 2 \end{bmatrix}$

c $\begin{bmatrix} 7 & 9 & 2 \end{bmatrix}$

d $\begin{bmatrix} -8 & -8 & -3 \end{bmatrix}$

e $\begin{bmatrix} -5 & -8 & -1 \end{bmatrix}$

7 Find the resulting matrix for zP - bD when z = 3 and b = 2

$$P = \begin{bmatrix} 0 & 4 & 9 \\ 5 & 6 & 1 \\ 4 & 3 & 7 \end{bmatrix}$$
$$D = \begin{bmatrix} 7 & 3 & 7 \\ 9 & 2 & 4 \\ 0 & 2 & 5 \end{bmatrix}$$

a $\begin{bmatrix} 3 & 3 \\ 2 & 2 \end{bmatrix}$

b $\begin{bmatrix} 0 & 12 & 27 \\ 15 & 18 & 3 \\ 12 & 9 & 21 \\ -14 & -6 & -14 \\ -18 & -4 & -8 \\ 0 & -4 & -10 \end{bmatrix}$

c $\begin{bmatrix} -14 & 6 & 13 \\ -3 & 14 & -5 \\ 12 & 5 & 11 \end{bmatrix}$

d $\begin{bmatrix} 9 & 0 & 9 \\ 5 & 8 & 7 \\ 3 & 6 & 8 \end{bmatrix}$

e $\begin{bmatrix} 3 & 3 & 0 \\ 9 & 0 & 0 \\ 2 & 8 & 8 \end{bmatrix}$