1. If $A = \begin{bmatrix} a & b \\ c & d \end{bmatrix}$ and $B = \begin{bmatrix} 7 & 5 \\ 9 & 1 \end{bmatrix}$ and if A = B,

find the values of a, b, c and d

(i) a = 1, b = 7, c = 5, d = 9 (ii) a = 7, b = 5, c = 9, d = 1 (iii) a = 1, b = 9, c = 7, d = 5

(iv) a = 9, b = 5, c = 7, d = 1

2. If $A = \begin{bmatrix} (9p+4) & (3q-3) \\ (9r-1) & 9s \end{bmatrix}$ and $B = \begin{bmatrix} 3 & 9 \\ 4 & 5 \end{bmatrix}$,

find the values of p, q, r and s

(i) p = -1/9, q = 5/9, r = 4, s = 5/9 (ii) p = -1/9, q = 4, r = 5/9, s = 5/9 (iii) p = 4, q = -1/9, r = 5/9, s = 5/9

3. If $\begin{bmatrix} (7x+3y) & 5 \\ 3 & (6x+7y) \end{bmatrix} = \begin{bmatrix} -3 & 5 \\ 3 & -5 \end{bmatrix}$, find x and y

(i) $(\frac{-17}{31}, \frac{-6}{31})$ (ii) $(\frac{-6}{31}, \frac{-17}{31})$ (iii) $(\frac{-2}{11}, \frac{-17}{33})$ (iv) $(\frac{-6}{31}, \frac{-17}{29})$ (v) $(\frac{-4}{31}, \frac{-17}{31})$

4. If $A = \begin{bmatrix} (x+6y) & (8x-6y) \\ (x+5y) & (8x+5y) \end{bmatrix} = \begin{bmatrix} 7 & 5 \\ a & b \end{bmatrix}$,

find a and b

(i) $(\frac{121}{20}, \frac{307}{20})$ (ii) $(\frac{37}{6}, \frac{277}{18})$ (iii) $(\frac{109}{18}, \frac{277}{18})$ (iv) $(\frac{109}{18}, \frac{247}{16})$ (v) $(\frac{277}{18}, \frac{109}{18})$

5. If $A = \begin{bmatrix} 3 & 0 \\ 0 & x \end{bmatrix}$ is a scalar matrix, then x = ?

(i) *x* (ii) *0* (iii) *9* (iv) *3* (v) *1*

6. If $X + Y = \begin{bmatrix} 17 & 6 \\ 5 & 6 \end{bmatrix}$ & $X - Y = \begin{bmatrix} -1 & 6 \\ -11 & 12 \end{bmatrix}$, find X and Y

(i) $\begin{bmatrix} 8 & 6 \\ -3 & 9 \end{bmatrix}, \begin{bmatrix} 9 & 0 \\ 8 & 0 \end{bmatrix}$ (ii) $\begin{bmatrix} 9 & 0 \\ 8 & -3 \end{bmatrix}, \begin{bmatrix} 8 & 6 \\ -3 & 9 \end{bmatrix}$ (iii) $\begin{bmatrix} 8 & 6 \\ -3 & 9 \end{bmatrix}, \begin{bmatrix} 9 & 0 \\ 8 & -3 \end{bmatrix}$ (iv) $\begin{bmatrix} 8 & 5 \\ -3 & 9 \end{bmatrix}, \begin{bmatrix} 9 & 0 \\ 8 & -3 \end{bmatrix}$

7. If $A = \begin{bmatrix} 3 & -2 \\ 4 & 6 \end{bmatrix}$ and the sum of the values of

elements of matrix kA = 22 , find k

(i) 0 (ii) 2 (iii) 1 (iv) 3 (v) 5

8. Given $A = \begin{bmatrix} 6 & -2 \\ -8 & 5 \end{bmatrix}$ and $B = \begin{bmatrix} a & \frac{1}{7} \\ b & \frac{3}{7} \end{bmatrix}$,

if BA = I find a and b

(i) $a = \frac{5}{14}$, $b = \frac{4}{7}$ (ii) $a = \frac{3}{5}$, $b = \frac{4}{7}$ (iii) $a = \frac{5}{14}$, $b = \frac{1}{9}$ (iv) $a = \frac{1}{9}$, $b = \frac{3}{5}$

Assignment Key

1) (ii)	2) (ii)	3) (ii)	4) (iii)	5) (iv)	6) (iii)
7) (ii)	8) (i)				