1. If $A = \begin{bmatrix} a & b \\ c & d \end{bmatrix}$ and $B = \begin{bmatrix} 7 & 9 \\ 4 & 6 \end{bmatrix}$ and if A = B,

   find the values of a, b, c and d

   (i) a = 9, b = 6, c = 7, d = 4 (ii) a = 9, b = 4, c = 7, d = 6 (iii) a = 7, b = 9, c = 4, d = 6

   (iv) a = 6, b = 9, c = 4, d = 7

2. If $A = \begin{bmatrix} (8p-3) & (8q-3) \\ (2r-8) & (9s-3) \end{bmatrix}$ and $B = \begin{bmatrix} 9 & 3 \\ 6 & 4 \end{bmatrix}$,

   find the values of p, q, r and s

   (i) p = 3/4, q = 3/2, r = 7/9, s = 7 (ii) p = 3/2, q = 7, r = 3/4, s = 7/9 (iii) p = 3/2, q = 3/4, r = 7, s = 7/9

   (iv) p = 3/4, q = 3/2, r = 7, s = 7/9 (v) p = 3/2, q = 7/9, r = 3/4, s = 7

3. If $\begin{bmatrix} (2x+8y) & 3 \\ 2 & (2x+3y) \end{bmatrix} = \begin{bmatrix} -4 & 3 \\ 2 & -7 \end{bmatrix}$, find x and y

   (i) $(-4, \frac{3}{5})$ (ii) $((\frac{-30}{7}), \frac{3}{7})$ (iii) $(\frac{3}{5}, (\frac{-22}{5}))$ (iv) $((\frac{-22}{5}), 1)$ (v) $((\frac{-22}{5}), \frac{3}{5})$

4. If $A = \begin{bmatrix} (-8x-6y) & (-6x+4y) \\ (x+7y) & (4x+5y) \end{bmatrix} = \begin{bmatrix} 0 & (-7) \\ a & b \end{bmatrix}$,

   find a and b

   (i) $((\frac{-185}{36}), (\frac{-30}{19}))$ (ii) $((\frac{-175}{34}), (\frac{-26}{15}))$ (iii) $((\frac{-173}{34}), (\frac{-28}{17}))$ (iv) $((\frac{-175}{34}), (\frac{-28}{17}))$ (v) $((\frac{-28}{17}), (\frac{-175}{34}))$

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

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

6. If $X + Y = \begin{bmatrix} 7 & -13 \\ -17 & 10 \end{bmatrix}$ & $X - Y = \begin{bmatrix} -1 & -1 \\ -1 & -4 \end{bmatrix}$, find X and Y

   (i) $\begin{bmatrix} 3 & -7 \\ -9 & 3 \end{bmatrix}, \begin{bmatrix} 4 & -6 \\ -8 & 9 \end{bmatrix}$ (ii) $\begin{bmatrix} 2 & -7 \\ -9 & 3 \end{bmatrix}, \begin{bmatrix} 4 & -6 \\ -8 & 7 \end{bmatrix}$ (iii) $\begin{bmatrix} 3 & -7 \\ -9 & 3 \end{bmatrix}, \begin{bmatrix} 4 & -6 \\ -8 & 7 \end{bmatrix}$ (iv) $\begin{bmatrix} 4 & -6 \\ -8 & 7 \end{bmatrix}, \begin{bmatrix} 3 & -7 \\ -9 & 3 \end{bmatrix}$

7. If $A = \begin{bmatrix} 3 & 6 \\ 8 & -4 \end{bmatrix}$ and the sum of the values of

   elements of matrix kA = 104 , find k

   (i) 8 (ii) 9 (iii) 11 (iv) 5 (v) 7

8. Given $A = \begin{bmatrix} 0 & -6 \\ 6 & 9 \end{bmatrix}$ and $B = \begin{bmatrix} a & \frac{1}{6} \\ b & 0 \end{bmatrix}$,

if BA = I find a and b

(i) $a = \frac{1}{4}$, $b = \frac{1}{8}$ (ii) $a = -1$, $b = (\frac{-1}{6})$ (iii) $a = \frac{1}{8}$, $b = -1$ (iv) $a = \frac{1}{4}$, $b = (\frac{-1}{6})$

Assignment Key

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