

Matrices

Name: _____

Date: _____

Order of Matrices.

1)
$$\begin{bmatrix} 7\sqrt{3} & \frac{\sqrt{2}}{3} \\ \sqrt{3} & -6 \\ \frac{1}{2} & 5\frac{1}{5} \\ \frac{2}{\sqrt{3}} & \frac{\sqrt{5}}{4} \end{bmatrix} \begin{bmatrix} \sqrt{3} & 6\frac{1}{5} & \frac{\sqrt{2}}{\sqrt{3}} & -8 \\ \frac{\sqrt{2}}{3} & 0 & -3 & -\sqrt{11} \end{bmatrix}$$

Order = _____

2)
$$\begin{bmatrix} -\sqrt{5} \\ 7\frac{1}{7} \\ -5 \\ \frac{\sqrt{5}}{3} \end{bmatrix} \begin{bmatrix} -4 & 0 & \sqrt{5} & \frac{\sqrt{7}}{4} \end{bmatrix}$$

Order = _____

3)
$$\begin{bmatrix} \frac{7}{2} & \frac{\sqrt{7}}{6} & \frac{-3}{2} \\ 0 & 6 & 3 \\ 4\frac{1}{2} & 9\frac{1}{2} & \frac{1}{10} \\ -\sqrt{14} & \frac{1}{2} & \frac{5}{\sqrt{7}} \end{bmatrix} \begin{bmatrix} -3 & \frac{1}{\sqrt{6}} \\ \frac{\sqrt{5}}{8} & 8\frac{1}{3} \\ 6\frac{1}{9} & -7 \end{bmatrix}$$

Order = _____

4)
$$\begin{bmatrix} -6 & \frac{1}{12} & -\sqrt{8} \\ \frac{\sqrt{3}}{\sqrt{5}} & \sqrt{3} & 5\frac{1}{5} \end{bmatrix} \begin{bmatrix} 6\frac{1}{5} & -5 & \sqrt{2} \\ \frac{\sqrt{3}}{4} & \frac{\sqrt{7}}{\sqrt{5}} & 9\frac{1}{9} \\ 2\sqrt{3} & 8\frac{1}{7} & -3 \end{bmatrix}$$

Order = _____

5)
$$\begin{bmatrix} 8\frac{1}{6} & \frac{\sqrt{6}}{\sqrt{5}} \\ 4\sqrt{5} & \frac{1}{6} \end{bmatrix} \begin{bmatrix} 5 & -4 \\ \frac{1}{9} & \frac{\sqrt{8}}{3} \end{bmatrix}$$

Order = _____

6)
$$\begin{bmatrix} 6\sqrt{2} & -5 & \frac{1}{5} & 7\frac{1}{3} \\ 3\frac{\sqrt{5}}{2} & \sqrt{5} & 5\sqrt{7} & 0 \\ 7\frac{1}{8} & -\sqrt{3} & -\sqrt{13} & \frac{\sqrt{2}}{\sqrt{3}} \end{bmatrix} \begin{bmatrix} \frac{\sqrt{4}}{2} & \frac{\sqrt{7}}{4} & -\sqrt{10} \\ \frac{4\sqrt{3}}{3} & \frac{\sqrt{2}}{2} & \frac{1}{4} \\ 6\frac{1}{5} & \frac{3}{\sqrt{5}} & 9\frac{1}{2} \\ \sqrt{3} & \frac{1}{7} & 5\sqrt{8} \end{bmatrix}$$

Order = _____

7)
$$\begin{bmatrix} 8 \\ -5 \\ -\sqrt{10} \end{bmatrix} \begin{bmatrix} \sqrt{12} & -8 & 5\sqrt{13} \end{bmatrix}$$

Order = _____

8)
$$\begin{bmatrix} \sqrt{3} & \sqrt{2} & \sqrt{9} \\ \sqrt{6} & \sqrt{5} & \sqrt{4} \\ 1 & \sqrt{6} & 0 \end{bmatrix} \begin{bmatrix} \sqrt{3} \\ \frac{\sqrt{3}}{2} \\ \sqrt{5} \end{bmatrix}$$

Order = _____

Matrices

Name: _____

Date: _____

Order of Matrices.

1)
$$\begin{bmatrix} 7\sqrt{3} & \frac{\sqrt{2}}{3} \\ \sqrt{3} & -6 \\ \frac{1}{2} & 5\frac{1}{5} \\ \frac{2}{\sqrt{3}} & \frac{\sqrt{5}}{4} \end{bmatrix} \begin{bmatrix} \sqrt{3} & 6\frac{1}{5} & \frac{\sqrt{2}}{\sqrt{3}} & -8 \\ \frac{\sqrt{2}}{3} & 0 & -3 & -\sqrt{11} \end{bmatrix}$$

Order = 4x4

2)
$$\begin{bmatrix} -\sqrt{5} \\ 7\frac{1}{7} \\ -5 \\ \frac{\sqrt{5}}{3} \end{bmatrix} \begin{bmatrix} -4 & 0 & \sqrt{5} & \frac{\sqrt{7}}{4} \end{bmatrix}$$

Order = 4x4

3)
$$\begin{bmatrix} \frac{7}{2} & \frac{\sqrt{7}}{6} & \frac{-3}{2} \\ 0 & 6 & 3 \\ 4\frac{1}{2} & 9\frac{1}{2} & \frac{1}{10} \\ -\sqrt{14} & \frac{1}{2} & \frac{5}{\sqrt{7}} \end{bmatrix} \begin{bmatrix} -3 & \frac{1}{\sqrt{6}} \\ \frac{\sqrt{5}}{8} & 8\frac{1}{3} \\ 6\frac{1}{9} & -7 \end{bmatrix}$$

Order = 4x2

4)
$$\begin{bmatrix} -6 & \frac{1}{12} & -\sqrt{8} \\ \frac{\sqrt{3}}{\sqrt{5}} & \sqrt{3} & 5\frac{1}{5} \end{bmatrix} \begin{bmatrix} 6\frac{1}{5} & -5 & \sqrt{2} \\ \frac{\sqrt{3}}{4} & \frac{\sqrt{7}}{\sqrt{5}} & 9\frac{1}{9} \\ 2\sqrt{3} & 8\frac{1}{7} & -3 \end{bmatrix}$$

Order = 2x3

5)
$$\begin{bmatrix} 8\frac{1}{6} & \frac{\sqrt{6}}{\sqrt{5}} \\ 4\sqrt{5} & \frac{1}{6} \end{bmatrix} \begin{bmatrix} 5 & -4 \\ \frac{1}{9} & \frac{\sqrt{8}}{3} \end{bmatrix}$$

Order = 2x2

6)
$$\begin{bmatrix} 6\sqrt{2} & -5 & \frac{1}{5} & 7\frac{1}{3} \\ 3\frac{\sqrt{5}}{2} & \sqrt{5} & 5\sqrt{7} & 0 \\ 7\frac{1}{8} & -\sqrt{3} & -\sqrt{13} & \frac{\sqrt{2}}{\sqrt{3}} \end{bmatrix} \begin{bmatrix} \frac{\sqrt{4}}{2} & \frac{\sqrt{7}}{4} & -\sqrt{10} \\ \frac{4\sqrt{3}}{3} & \frac{\sqrt{2}}{2} & \frac{1}{4} \\ 6\frac{1}{5} & \frac{3}{\sqrt{5}} & 9\frac{1}{2} \\ \sqrt{3} & \frac{1}{7} & 5\sqrt{8} \end{bmatrix}$$

Order = 3x3

7)
$$\begin{bmatrix} 8 \\ -5 \\ -\sqrt{10} \end{bmatrix} \begin{bmatrix} \sqrt{12} & -8 & 5\sqrt{13} \end{bmatrix}$$

Order = 3x3

8)
$$\begin{bmatrix} \sqrt{3} & \sqrt{2} & \sqrt{9} \\ \sqrt{6} & \sqrt{5} & \sqrt{4} \\ 1 & \sqrt{6} & 0 \end{bmatrix} \begin{bmatrix} \sqrt{3} \\ \frac{\sqrt{3}}{2} \\ \sqrt{5} \end{bmatrix}$$

Order = 3x1