$\qquad$

## Order of Matrices.

1) 

$$
\left[\begin{array}{rcc}
\sqrt{2} & 6 & 0 \\
-4 & 7 & 9 \\
5 & 2 & \sqrt{5} \\
\sqrt{3} & 1 & 3
\end{array}\right]\left[\begin{array}{cccc}
5 & 7 & 3 & \sqrt{2} \\
-3 & \sqrt{3} & 5 & 5 \\
-2 & 7 & 1 & 2
\end{array}\right]
$$

Order $=\quad 4 \times 4$
3)

$$
\left[\begin{array}{lll}
\sqrt{2} & 3 & 2 \sqrt{2}
\end{array}\right]\left[\begin{array}{rr}
-2 & \sqrt{5} \\
\sqrt{3} & \frac{4}{5} \\
4 & -1
\end{array}\right]
$$

Order = $\qquad$
5)

$$
\left[\begin{array}{cc}
2 \frac{1}{2} & \sqrt{5} \\
\sqrt{3} & 7 \\
9 \sqrt{2} & \frac{8}{5}
\end{array}\right]\left[\begin{array}{cccc}
2 \sqrt{2} & -5 & \frac{4}{5} & \sqrt{4} \\
\frac{\sqrt{5}}{7} & 0 & 6 & -3
\end{array}\right]
$$

Order = $\qquad$
7) $\left[\begin{array}{cc}2 \sqrt{2} & -5 \\ 9 & 2 \frac{1}{2}\end{array}\right]\left[\begin{array}{ccc}\frac{7}{4} & \frac{8}{\sqrt{5}} & 2 \\ 3 \sqrt{5} & -7 & \frac{8}{5}\end{array}\right]$

Order =
2) $\left[\begin{array}{r}2 \\ 3 \\ 4 \\ -6 \\ -3\end{array}\right]\left[\begin{array}{lllll}3 & \sqrt{2} & 7 \sqrt{6} & 5 & 1\end{array}\right]$

Order $=$ $\qquad$
4)

$$
\left[\begin{array}{lll}
-9 & \sqrt{4} & \frac{2}{3}
\end{array}\right]\left[\begin{array}{ccc}
\frac{1}{2} & 5 & 2 \\
6 & 0 & -8 \\
\sqrt{7} & 4 & \frac{3}{4}
\end{array}\right]
$$

Order $=$
6) $\left[\begin{array}{rrrr}\frac{\sqrt{2}}{3} & 4 & 5 & \frac{2}{3} \\ 1 & 4 & -2 & \frac{1}{2}\end{array}\right]\left[\begin{array}{rcr}9 & \sqrt{7} & -9 \\ -4 & 6 & 6 \\ -5 & \frac{3}{\sqrt{2}} & -1 \\ 6 \sqrt{5} & 5 & 2\end{array}\right]$

Order =
8) $\left[\begin{array}{cc}\frac{1}{4} & 5 \frac{1}{4} \\ \frac{\sqrt{3}}{2} & -7\end{array}\right]\left[\begin{array}{cccc}-7 & 5 \frac{1}{4} & \frac{\sqrt{8}}{7} & \frac{2}{3} \\ \frac{5}{3} & 8 & \frac{\sqrt{3}}{2} & \frac{1}{4}\end{array}\right]$

Order =
$\qquad$
$\qquad$

## Order of Matrices.

1) 

$$
\left[\begin{array}{ccc}
\sqrt{2} & 6 & 0 \\
-4 & 7 & 9 \\
5 & 2 & \sqrt{5} \\
\sqrt{3} & 1 & 3
\end{array}\right]\left[\begin{array}{cccc}
5 & 7 & 3 & \sqrt{2} \\
-3 & \sqrt{3} & 5 & 5 \\
-2 & 7 & 1 & 2
\end{array}\right]
$$

Order $=\quad 4 \times 4$
3)

$$
\left[\begin{array}{lll}
\sqrt{2} & 3 & 2 \sqrt{2}
\end{array}\right]\left[\begin{array}{rr}
-2 & \sqrt{5} \\
\sqrt{3} & \frac{4}{5} \\
4 & -1
\end{array}\right]
$$

Order $=1 \mathrm{x} 2$
5)

$$
\begin{gathered}
{\left[\begin{array}{cc}
2 \frac{1}{2} & \sqrt{5} \\
\sqrt{3} & 7 \\
9 \sqrt{2} & \frac{8}{5}
\end{array}\right]\left[\begin{array}{cccc}
2 \sqrt{2} & -5 & \frac{4}{5} & \sqrt{4} \\
\frac{\sqrt{5}}{7} & 0 & 6 & -3
\end{array}\right]}
\end{gathered} \begin{array}{cc}
\text { Order }= & 2 \times 3 \\
\text { Order }=3 \times 4 & {\left[\begin{array}{rrrr}
\frac{\sqrt{2}}{3} & 4 & 5 & \frac{2}{3} \\
1 & 4 & -2 & \frac{1}{2}
\end{array}\right]\left[\begin{array}{rrr}
9 & \sqrt{7} & -9 \\
-4 & 6 & 6 \\
-5 & \frac{3}{\sqrt{2}} & -1 \\
6 \sqrt{5} & 5 & 2
\end{array}\right]} \\
\text { 7) }\left[\begin{array}{cc}
2 \sqrt{2} & -5 \\
9 & 2 \frac{1}{2}
\end{array}\right]\left[\begin{array}{ccc}
\frac{7}{4} & \frac{8}{\sqrt{5}} & 2 \\
3 \sqrt{5} & -7 & \frac{8}{5}
\end{array}\right]
\end{array}
$$

Order = $\qquad$
2) $\left[\begin{array}{r}2 \\ 3 \\ 4 \\ -6 \\ -3\end{array}\right]\left[\begin{array}{lllll}3 & \sqrt{2} & 7 \sqrt{6} & 5 & 1\end{array}\right]$

Order $=\quad 5 \times 5$
4) $\left[\begin{array}{lll}-9 & \sqrt{4} & \frac{2}{3}\end{array}\right]\left[\begin{array}{ccc}\frac{1}{2} & 5 & 2 \\ 6 & 0 & -8 \\ \sqrt{7} & 4 & \frac{3}{4}\end{array}\right]$

Order $=1 \times 3$ Order $=2 \times 4$

