

Name: _____

Determinants

Exercise 1: Evaluate each determinant

1) $\begin{vmatrix} 8 & -19 \\ 4 & 1 \end{vmatrix}$

2) $\begin{vmatrix} 8 & 2 \\ 7 & -1 \end{vmatrix}$

3) $\begin{vmatrix} 5 & 3 \\ 4 & -3 \end{vmatrix}$

4) $\begin{vmatrix} 2 & 2 \\ 8 & 9 \end{vmatrix}$

5) $\begin{vmatrix} 12 & 35 \\ 23 & 45 \end{vmatrix}$

6) $\begin{vmatrix} 8 & 9 & 4 \\ 4 & 7 & 10 \\ 7 & 4 & 5 \end{vmatrix}$

7) $\begin{vmatrix} 8 & 9 & 4 \\ 4 & 3 & 10 \\ 7 & 2 & 9 \end{vmatrix}$

8) $\begin{vmatrix} 8 & 9 & 12 & 7 \\ 4 & 1 & 8 & 2 \\ 7 & 4 & 4 & 2 \\ -2 & 8 & 1 & 4 \end{vmatrix}$

Exercise 2: Show that:

$$k \cdot \begin{vmatrix} a & b \\ c & d \end{vmatrix} = \begin{vmatrix} ka & kb \\ kc & kd \end{vmatrix}$$