

Student Name: \_\_\_\_\_

Score: \_\_\_\_\_

### Evaluate the Determinants

Fractions: S1

Evaluate the following determinants:

$$\begin{vmatrix} 7 & -23 \\ 8 & 5 \\ 2 & 12 \end{vmatrix} = \boxed{\phantom{000}}$$

$$\begin{vmatrix} 2 & 9 \\ 3 & 13 \\ 39 & -12 \end{vmatrix} = \boxed{\phantom{000}}$$

$$\begin{vmatrix} 9 & -5 \\ 6 & 3 \\ 7 & 4 \end{vmatrix} = \boxed{\phantom{000}}$$

$$\begin{vmatrix} 4 & -14 \\ 9 & 15 \\ 3 & -6 \\ 5 & 5 \end{vmatrix} = \boxed{\phantom{000}}$$

$$\begin{vmatrix} 27 & 8 \\ 45 & 11 \\ 4 & 3 \end{vmatrix} = \boxed{\phantom{000}}$$

$$\begin{vmatrix} 16 & 12 \\ 14 & -5 \\ 3 & -5 \end{vmatrix} = \boxed{\phantom{000}}$$

$$\begin{vmatrix} 6 & 18 \\ 7 & 35 \\ 3 & 4 \\ 2 & 4 \end{vmatrix} = \boxed{\phantom{000}}$$

$$\begin{vmatrix} -4 & -5 \\ 7 & 28 \\ 13 & 3 \end{vmatrix} = \boxed{\phantom{000}}$$

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**Answer key**

**Evaluate the Determinants**

Fractions: S1

$$\begin{vmatrix} 7 & -23 \\ 8 & 12 \\ 5 & 12 \\ 2 & 12 \end{vmatrix} = 68$$

$$\begin{vmatrix} 2 & 9 \\ 3 & 13 \\ 39 & -12 \end{vmatrix} = -35$$

$$\begin{vmatrix} 9 & -5 \\ 6 & 12 \\ 7 & 3 \\ 4 & 4 \end{vmatrix} = \frac{151}{12}$$

$$\begin{vmatrix} 4 & -14 \\ 9 & 15 \\ 3 & -6 \\ 5 & 5 \end{vmatrix} = \frac{34}{15}$$

$$\begin{vmatrix} 27 & 8 \\ 45 & 11 \\ 4 & 3 \end{vmatrix} = 89$$

$$\begin{vmatrix} 16 & 12 \\ 14 & 7 \\ 3 & -5 \end{vmatrix} = -88$$

$$\begin{vmatrix} 6 & 18 \\ 7 & 35 \\ 3 & 4 \\ 2 & 4 \end{vmatrix} = \frac{-39}{2}$$

$$\begin{vmatrix} -4 & -5 \\ 7 & 28 \\ 13 & 3 \end{vmatrix} = \frac{179}{3}$$