

Name:

If $\begin{vmatrix} a & b & c \\ d & e & f \\ g & h & i \end{vmatrix} = 2$, compute the following determinants:

$$\bullet \begin{vmatrix} g & h & i \\ d & e & f \\ a & b & c \end{vmatrix}$$

$$\bullet \begin{vmatrix} g & h & i \\ a & b & c \\ d & e & f \end{vmatrix}$$

$$\bullet \begin{vmatrix} a & b & c \\ -d/2 & -e/2 & -f/2 \\ g & h & i \end{vmatrix}$$

$$\bullet \begin{vmatrix} a & b & c \\ 5d-a & 5e-b & 5f-c \\ g & h & i \end{vmatrix}$$

$$\bullet \begin{vmatrix} a & b & c \\ d-5a & e-5b & f-5c \\ g & h & i \end{vmatrix}$$

$$\bullet \begin{vmatrix} 3a & 3b & 3c \\ 3d & 3e & 3f \\ 3g & 3h & 3i \end{vmatrix}$$

$$\bullet \begin{vmatrix} 0 & 0 & 0 \\ d & e & f \\ g & h & i \end{vmatrix}$$

$$\bullet \begin{vmatrix} a & d & g \\ b & e & h \\ c & f & i \end{vmatrix}$$