

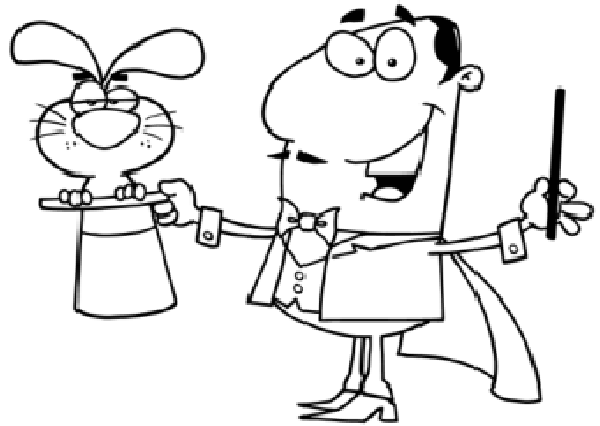
Name _____

Date _____

Determinants and Inverses of 2 x 2 Matrices - Step-by-Step Lesson

Calculate the determinant of the matrix:

$$\begin{bmatrix} 6 & 7 \\ 2 & 3 \end{bmatrix}$$



Explanation:

$$\begin{bmatrix} 6 & 7 \\ 2 & 3 \end{bmatrix}$$

Step 2) The determinant of a 2 x 2 matrix can be expressed as:

$$|A| = ad - bc.$$

$$A = \begin{bmatrix} a & b \\ c & d \end{bmatrix}$$

Step 3) Now calculate using this method.

$$|A| = 6(3) - 7(2)$$

$$|A| = 18 - 14$$

$$|A| = 4$$

The answer is 4.

