

Name: _____

Determinants

1) If $B = \begin{pmatrix} 2 & 1 \\ 3 & 5 \end{pmatrix}$, find $|B|$

2) If the determinant of $\begin{pmatrix} 1 & 4 \\ -2 & x \end{pmatrix} = 5$, find x

3) Given $A = \begin{pmatrix} 5 & 3 \\ 6 & 4 \end{pmatrix}$, $B = \begin{pmatrix} 2 & 1 \\ 7 & 6 \end{pmatrix}$, $C = \begin{pmatrix} 8 & 4 \\ 10 & 4 \end{pmatrix}$

- Write down an equation connecting A, B and C
- Find A^{-1}
- Calculate $A^{-1}C$
- Explain the significance of your answer to part (c)