

Class 3 Partial Answers
Physics 403: Mathematical Methods
February 25, 2008

1. $\det A = 13$, $\text{tr}A = 7$, $\det B = -80$, $\text{tr}B = 8$

2.

$$\mathbf{AB} = \begin{pmatrix} -39 & 34 & -15 \\ -29 & 28 & 4 \\ -8 & 2 & -21 \end{pmatrix}.$$

$$\det AB = \det A \det B = -1040$$

3.

$$\mathbf{A}^T = \begin{pmatrix} 3 & 0 & 2 \\ -2 & 1 & -3 \\ 8 & 4 & 3 \end{pmatrix}.$$

4. 609