A Simple little problem using Maple.

Let A be the 5 by 5 matrix:

$$A = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 \\ -1 & 2 & 3 & 4 & 5 \\ -1 & -2 & 3 & 4 & 5 \\ -1 & -2 & -3 & 4 & 5 \\ -1 & -2 & -3 & -4 & 5 \end{pmatrix}$$

1. Find the determinant of A.
2. Find A^{-1}
3. Find the determinant of A^{-1}.
4. Is it true that $\det(A^{-1}) = \frac{1}{\det(A)}$?

Answer all these questions using Maple. Print up the Maple worksheet that clearly gives these answers. Staple with homework #3. The Maple portion is worth four points. You have a maximum of two pages (one sided) or one page (two-sided). I you exceed the page limit, you will get **No Credit**.